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DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR  
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WASHINGTON DC FEB 84

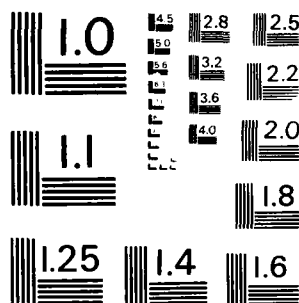
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MICROCOPY RESOLUTION TEST CHART  
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**DEPARTMENT OF THE NAVY  
JUSTIFICATION OF ESTIMATES  
FOR FISCAL YEAR 1985**



**SUBMITTED TO CONGRESS FEBRUARY 1984**

**PROCUREMENT**

**OTHER PROCUREMENT, NAVY**

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Other Procurement, Navy

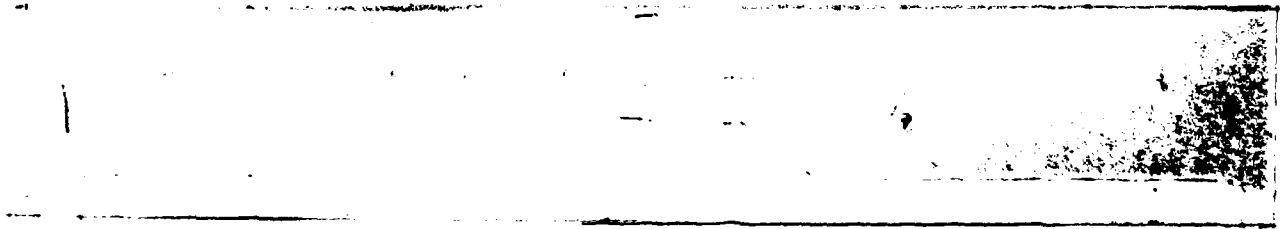
Justification of Estimates for Fiscal Year 1985

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#### Other Procurement, Navy

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance and ammunition (except ordnance for new aircraft, new ships, and ships authorized for conversion); the purchase of not to exceed [one] one vehicle required for physical security of personnel notwithstanding price limitations applicable to passenger carrying vehicles but not to exceed [\$100,000] \$110,000 per vehicle and the purchase of not to exceed [six hundred and sixty-seven] eight hundred and fifteen passenger motor vehicles of which [six hundred and twenty-five] seven hundred and forty-eight shall be for replacement only; expansion of public and private plants, including the land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title [as required by section 355, Revised Statutes, as amended]; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, [as follows: For ship support equipment, \$673,909,000; for communications and electronics equipment, \$1,555,233,000; for aviation support equipment, \$699,405,000; for ordnance support equipment, \$926,162,000 of which \$698,000 shall be available only for procurement of 9mm handgun ammunition; for civil engineering support equipment, \$196,622,000; for supply support equipment \$112,474,000; and for personnel/command support equipment \$275,601,000; in all, \$4,308,543,000] \$5,953,900,000 to remain available for obligation until September 30, [1986] 1987 (10 U. S. C., 5012,5031; Department of Defense Appropriation Act, 1984; additional authorizing legislation to be proposed.)

1810n Other Procurement, Navy  
Program and Financing (in thousands of dollars)

FYP SUMMARY

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code		1983 actual	1984 est	1985 est	1983 actual	1984 est.	1985 est.
-----							
Program by activities							
Direct Program:							
1.	Ships support equipment	533,599	666,538	857,100	519,639	643,572	871,711
2.	Communications and electronics equ	1,412,635	1,513,422	1,813,800	1,148,456	1,442,741	1,591,031
3.	Aviation support equipment	565,944	660,692	1,081,500	600,807	675,432	1,027,543
4.	Ordnance support equipment	694,966	901,204	1,229,600	614,976	931,687	1,174,144
5.	Civil engineering support equipmen	169,648	186,395	313,300	137,182	245,207	291,113
6.	Supply support equipment	87,822	106,365	130,100	82,758	132,509	144,372
7.	Personnel and command support equi	228,061	279,927	528,500	213,458	347,220	491,594
Total direct program		3,692,675	4,314,543	5,953,900	3,317,276	4,418,368	5,591,508
Reimbursable program		77,016	40,000	40,000	12,996	129,826	40,000
-----		-----	-----	-----	-----	-----	-----
10.0001	Total Obligations	3,769,691	4,354,543	5,993,900	3,330,272	4,548,194	5,631,508
-----							
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-18,698	-16,000	-16,000	-16,842	-16,000	-16,000
13.0001	Trust funds(-)	-57,834	-22,000	-22,000	-53,221	-22,000	-22,000
14.0001	Non-federal sources(-)	-484	-2,000	-2,000	-660	-2,000	-2,000
17.0001	Recovery of prior year obligations(-):				-7,567		
Unobligated balance available, SOY							
21.4002	For completion of prior year budget pla				-1,245,915	-1,593,489	-1,427,838
21.4007	Reprogramming from or to prior year budget	-93,120	28,000				
21.4001	Net unobligated balance transferred		-28,000			-28,000	
Unobligated balance available, EOY							
24.4002	For completion of prior year budget pla				1,593,489	1,427,838	1,790,230
20.0001	Unobligated balance lapsing	65,120			65,120		
-----		-----	-----	-----	-----	-----	-----
39.0001	Budget authority	3,664,675	4,314,543	5,953,900	3,664,675	4,314,543	5,953,900
-----							
Budget authority:							
40.0001	Appropriation	3,727,075	4,308,543	5,953,900	3,727,075	4,308,543	5,953,900
40.0002	Reduction pursuant to P.L. 97-377	-21,200			-21,200		
41.0001	Transferred to other accounts(-)	-50,900			-50,900		
42.0001	Transferred from other accounts	9,700	6,000		9,700	6,000	
-----		-----	-----	-----	-----	-----	-----
43.0001	Appropriation (adjusted)	3,664,675	4,314,543	5,953,900	3,664,675	4,314,543	5,953,900
-----							
Reconciliation of obligations to outlays:							
71.0001	Obligations incurred, net				3,259,549	4,508,194	5,591,508
72.4001	Obligated balance, start of year				4,806,333	4,874,750	5,994,344
74.4001	Obligated balance, end of year				-4,874,750	-5,994,344	-7,523,452
75.0001	Adjustments in expired accounts				22,227		
73.0001	Adjustments in unexpired accounts				-7,567		
-----		-----	-----	-----	-----	-----	-----
90.0001	Outlays				3,205,792	3,388,600	4,062,400

1810n Other Procurement, Navy  
Program and Financing (in Thousands of dollars)

FISCAL YEAR 1981

Identification code	17-1810-----	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by activities							
Direct Program:							
1.	Ships support equipment				18,684		
2.	Communications and electronics equipm				47,176		
3.	Aviation support equipment				23,171		
4.	Ordnance support equipment				20,669		
5.	Civil engineering support equipment				11,838		
6.	Supply support equipment				8,214		
7.	Personnel and command support equipme				25,412		
Total direct program					155,164		
Reimbursable program					10,166		
10.0001	Total Obligations				165,330		
Financing:							
Offsetting collections from:							
11.0001	Adjustment to prior year federal fund or				53		
13.0001	Adjustment to prior year trust fund orde				861		
14.0001	Adjustment to non-federal sources				-90		
17.0001	Recoveries of prior year obligations(-)				-5,110		
Unobligated balance available, SOY							
21.4002	For completion of prior year budget plans				-226,164		
21.4007	Reprogramming from or to prior year budget pl	-65,120					
25.0001	Unobligated balance lapsing	65,120			65,120		
39.0001	Budget authority						

1810n Other Procurement, Navy  
Program and Financing (in Thousands of dollars)

FISCAL YEAR 1982

Identification code		Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est	1985 est	1983 actual	1984 est	1985 est
Program by activities							
Direct Program:							
1.		Ships support equipment			94,830	40,643	
2.		Communications and electronics equipm			177,208	136,030	
3.		Aviation support equipment			135,901	44,229	
4.		Ordnance support equipment			115,658	64,209	
5.		Civil engineering support equipment			50,148	14,736	
6.		Supply support equipment			31,735	5,785	
7.		Personnel and command support equipme			52,934	24,374	
Total direct program					658,414	330,006	
Reimbursable program					2,630	25,690	
10.0001	Total Obligations				661,044	355,696	
Financing:							
Offsetting collections from:							
11.0001	Adjustment to prior year federal fund or				1,803		
13.0001	Adjustment to prior year trust fund orde				3,752		
14.0001	Adjustment to non-federal sources				-86		
17.0001	Recoveries of prior year obligations(-)				-2,457		
Unobligated balance available, SOY							
21.4002	For completion of prior year budget plans				-1,019,751	-355,696	
Unobligated balance available, EOY							
24.4002	For completion of prior year budget plans				355,696		
39.0001	Budget authority						

1810n Other Procurement, Navy  
Program and Financing (in Thousands of dollars)

FISCAL YEAR 1963

Identification code	17-1810-----	Budget Plan (amounts for actions programmed)			Obligations		
		1983 actual	1984 est.	1985 est.	1983 actual	1984 est.	1985 est.
Program by activities							
Direct Program:							
1.	Ships support equipment	533,399			406,125	91,604	35,670
2.	Communications and electronics equipm	1,412,635			924,072	304,304	164,259
3.	Aviation support equipment	565,944			441,735	86,622	37,567
4.	Ordnance support equipment	694,966			478,649	169,753	46,564
5.	Civil engineering support equipment	169,648			75,196	83,096	11,356
6.	Supply support equipment	87,822			42,809	39,128	5,665
7.	Personnel and command support equipme	220,061			135,112	77,748	15,261
Total direct program		3,692,675			2,503,698	852,455	336,522
Reimbursable program		77,016			200	74,136	2,680
0001	Total Obligations	3,769,691			2,503,898	926,591	339,202
Financing:							
Offsetting collections from:							
11 0001	Federal funds(-)	-18,698			-18,698		
13 0001	Trust funds(-)	-57,834			-57,834		
14 0001	Non-federal sources(-)	-484			-484		
Unobligated balance available, SOY							
21 1002	For completion of prior year budget plans					-1,237,793	-339,202
21 1007	Reprogramming from or to prior year budget pl	-28,000	28,000				
22 1001	Net unobligated balance transferred		-28,000			-28,000	
Unobligated balance available, EOY							
24 4002	For completion of prior year budget plans				1,237,793	339,202	
39 0001	Budget authority	3,664,675			3,664,675		
Budget authority:							
40 0001	Appropriation	3,727,075			3,727,075		
40 0002	Reduction pursuant to P.L. 97-377	-21,200			-21,200		
41 0001	Transferred to other accounts(-)	-50,900			-50,900		
42 0001	Transferred from other accounts	9,700			9,700		
43 0001	Appropriation (adjusted)	3,664,675			3,664,675		

1810n Other Procurement, Navy  
Program and Financing (in Thousands of dollars)

FISCAL YEAR 1984

		Budget Plan (amounts for actions programmed)			Obligations		
Identification code	17-1810-----	1983 actual	1984 est	1985 est	1983 actual	1984 est	1985 est
Program by activities							
Direct Program:							
1.	Ships support equipment		666,538			511,125	124,714
2.	Communications and electronics equipm		1,513,422			1,002,407	244,590
3.	Aviation support equipment		660,692			544,581	132,878
4.	Ordnance support equipment		901,204			697,725	170,244
5.	Civil engineering support equipment		186,395			147,375	35,959
6.	Supply support equipment		106,365			87,596	21,373
7.	Personnel and command support equipme		279,927			245,098	59,803
Total direct program			4,314,543			3,235,907	789,561
Reimbursable program			40,000			30,000	7,320
10.0001	Total Obligations		4,354,543			3,265,907	796,881
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)		-16,000			-16,000	
13.0001	Trust funds(-)		-22,000			-22,000	
14.0001	Non-federal sources(-)		-2,000			-2,000	
21.4002	Unobligated balance available, SOY						
	For completion of prior year budget plans						-1,088,636
24.4002	Unobligated balance available, EOY						
	For completion of prior year budget plans					1,088,636	291,755
39.0001	Budget authority		4,314,543			4,314,543	
Budget authority:							
40.0001	Appropriation		4,308,543			4,308,543	
42.0001	Transferred from other accounts		6,000			6,000	
43.0001	Appropriation (adjusted)		4,314,543			4,314,543	

1810n Other Procurement, Navy  
Program and Financing (in thousands of dollars)

FISCAL YEAR 1985

Identification code	17-1810-----	Budget Plan (amounts for actions programmed)			Obligations			
		1983 actual	1984 est.	1985 est	1983 actual	1984 est	1985 est	
Program by activities								
Direct Program								
1.	Ships support equipment			857,100			711,327	
2.	Communications and electronics equipm			1,813,800			1,162,182	
3.	Aviation support equipment			1,081,500			857,078	
4.	Ordnance support equipment			1,229,600			957,336	
5.	Civil engineering support equipment			313,300			243,798	
6.	Supply support equipment			130,100			117,114	
7.	Personnel and command support equipme			528,500			416,590	
Total direct program				5,953,900			4,465,425	
Reimbursable program				40,000			30,000	
10 0001	Total Obligations			5,993,900			4,495,425	
Financing								
Offsetting collections from:								
11 0001	Federal funds(-)			-16,000			-16,000	
13 0001	Trust funds(-)			-22,000			-22,000	
1 0001	Non-federal sources(-)			-2,000			-2,000	
Unobligated balance available, EOY								
24 4002	For completion of prior year budget plans						1,498,475	
40 0001	Budget Authority (Appropriation)			5,953,900			5,953,900	

1810n Other Procurement, Navy  
Object Classification (in Thousands of dollars)

Identification code	17-1810-----	1983 actual	1984 est	1985 est.
Direct obligations:				
12 5002	Purchases from industrial funds	44,466	48,897	48,897
12 5003	Contracts	95,461	106,563	106,963
12 5004	Other	49,055	55,179	55,179
12 6001	Supplies and materials	700,347	786,814	786,814
13 1001	Equipment	2,427,947	3,420,515	4,593,655
19 9001	Total direct obligations	3,317,276	4,418,368	5,591,508
Reimbursable Obligations:				
22 5002	Purchases from industrial funds	78	560	560
22 5003	Contracts	161	1,160	1,160
22 5004	Other	64	600	600
22 6001	Supplies and materials	1,280	9,200	9,200
23 1001	Equipment	11,393	118,306	28,480
29 9001	Total reimbursable obligations	12,996	129,826	40,000
49 9901	Total Obligations	3,330,272	4,548,194	5,631,508

BUDGET ACTIVITY: 1 SHIP SUPPORT EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(In Thousands)

	FY 1983 ACTUAL	FY 1984 ESTIMATE	FY 1985 ESTIMATE	FY 1986 ESTIMATE	JUSTIFICATION PAGE
SHIP PROPULSION EQUIPMENT	\$ 30,819	\$ 28,318	\$ 38,256	\$ 82,786	11
GENERATORS AND PUMPS	27,530	14,093	21,502	37,133	11
AIR COMPRESSORS	2,595	4,744	4,833	5,382	12
PROPELLERS	11,932	6,467	9,694	14,820	12
NAVIGATION EQUIPMENT	24,275	31,082	43,985	57,903	12
UNDERWAY REPLENISHMENT EQUIPMENT	8,616	7,242	9,971	8,824	13
PERISCOPES	4,632	8,748	23,525	25,257	13
OTHER SHIPBOARD EQUIPMENT:					
SHIP SILENCING	17,540	14,914	23,100	32,820	14
TRIDENT	10,760	16,179	48,431	65,266	15
DEEP SUBMERGENCE	5,981	8,322	14,324	12,802	15
SHIP SUPPORT IMPROVEMENT	17,065	18,018	17,440	21,800	16
MINESWEEPING EQUIPMENT	8,953	5,616	5,579	9,442	16
SAFETY EQUIPMENT	8,755	12,390	23,007	28,737	17
MISCELLANEOUS	44,451	62,785	84,145	190,826	18
REACTOR PLANT EQUIPMENT	247,206	353,692	396,155	590,000	19
OCEAN ENGINEERING	13,369	22,139	28,127	42,529	20
SMALL BOATS	21,485	22,408	25,939	44,652	20
TRAINING EQUIPMENT	1,262	2,882	3,781	29,694	21
PRODUCTION FACILITIES EQUIPMENT	24,754	25,800	31,827	27,159	21
SPARFS AND REPAIR PARTS	1,619	699	3,479	3,395	21
 TOTAL BUDGET PLAN	 \$533,599	 \$666,538	 \$857,100	 \$1,331,227	

Budget Activity 1 - Ships Support Equipment

(\$ In Thousands)

FY 1986 Estimate - \$1,331,227  
FY 1985 Estimate - \$ 857,100  
FY 1984 Estimate - \$ 666,538  
FY 1983 Actual - \$ 533,599

Purpose and Scope of Work

Budget Activity 1 programs include Shipboard Components, Reactor Fuel and Components, support of the Deep Submergence, TRIDENT and Small Boat procurement programs, and procurement of Production Facilities and Equipment.

Shipboard components, as well as nuclear components and small boats, are procured for direct installation on Active Fleet ships as part of a planned maintenance replacement program or as part of an improvement program. These components are also procured to fill authorized stock requirements. Funding for the Deep Submergence Program is aimed at expanding the Navy's capability to live, work, explore and rescue in deep ocean areas. Funds are also required to provide plant equipment and other support equipment for the TRIDENT Refit Facility. Production facilities equipment includes new and replacement machine tools and shop equipment for naval activities, operating forces and Shore Intermediate Maintenance Activities.

Ship Propulsion Equipment (P-1 Line Items 1-6)

(\$ In Thousands)	
FY 1985	FY 1986
\$38,256	\$82,786

These funds will provide for the procurement of equipment designed to improve the reliability, maintainability and durability of the LM 2500 Gas Turbine Engines introduced into the Fleet through the DD-963 and FFG-7 Class construction programs and the Allison 501K Gas Turbine engine introduced into the Fleet through the DD-963, DDG-993, and DD-997 Class ships. This will be accomplished through procurement of necessary modifications identified as a result of an on-going Component Improvement Program financed in the RDT&E appropriation. Existing 1200 and 600 PSI Steam Plants require sufficient funds to modify and improve reliability, including procurement of fuel oil strainers, lube oil mods, overspeed trips, boiler safety valves, stack gas analyzers and lube oil strainers. Funds requested will also procure ME831-800 gas turbines, fin stabilizer mods, main propulsion clutch mods, and auxiliary propulsors.

Generators and Pumps (P-1 Line Items 7-9)

(\$ In Thousands)	
FY 1985	FY 1986
\$21,502	\$37,133

These funds will provide for continuation of programs to replace obsolescent, unsupportable, underpowered and unreliable generators and pumps of various capacities and sizes. These programs also procure equipment to support programmed SHIPALTS. Types of equipment procured include a 500KW Motor Generator to support SSN-688 Class overhauls, solid state frequency changers to support CG and DDG overhauls, 2500KW Ship's Service Turbine Generators to support AD/AS overhauls and 43.2 KW Motor Generators to replace obsolete and unreliable 400 HZ Motor Generators on SSN's. Also included are trim and drain pumps for SSBNs; engine room fresh water pumps, propulsion lube pumps, high pressure brine pumps, lithium bromide pumps, air conditioning chill water pumps, trim and drain pumps and low pressure brine pumps for SSN-688 class ships; pumps in support of the phased maintenance program for AFS's and AOR's; fire pumps/ends/motors for CVs/CVNs; and pumps for the surface ship advanced equipment repair program.

Air Compressors (P-1 Line Items 10-11)

(\$ In Thousands)	
FY 1985	FY 1986
\$ 4,833	\$ 5,382

These funds will provide for the procurement of higher capacity and more reliable high pressure air compressors than those currently installed in the Active Fleet. Oil free 20 and 13 1/2 Cubic feet/hour (CFH) Air Compressors are needed to support combat weapon system operations on combatants. Also being procured are 30 Cubic feet/hour Air Compressors which are essential to the operation of Liquid Oxygen Generating Plants on aircraft carriers in direct support of aircraft, and oil-free 30 cubic feet/hour air compressors to provide required additional capability for submarine tenders. Also being procured are compressors to continually support requirements resulting from analyses of installed equipment which determines their potential for failure as a result of lengthened time between scheduled overhauls under the Submarine Extended Operating Cycle.

Propellers (P-1 Line Items 12-13)

(\$ In Thousands)	
FY 1985	FY 1986
\$ 9,694	\$14,820

These funds will provide for the procurement of propellers to reduce the noise signature on FBM and attack submarines and as replacements for those propellers currently installed as casualties occur. Funds are also required for replacement of blades, shafts and hubs in support of active fleet ships as damage or failure occurs.

Navigation Equipment (P-1 Line Items 14-17)

(\$ In Thousands)	
FY 1985	FY 1986
\$43,985	\$57,903

These funds will procure Electrically Suspended Gyro Navigators (ESGN) which are programmed as replacement for MK-3 Ships Inertial Navigation System (SINS) on SSN-637 Class and SSNs 671 and 685; and as replacement for Dual Miniature Inertial Navigation System (DMINS) on SSN-688 Class ships. The improvement over the MK-3 SINS is in reliability, maintainability, availability and performance. The improvement over DMINS is in performance.

Funds are required beginning in FY 1985 for the CV/CVN navigation system which will replace the MK-3 SINS system. The improvement in this is in reliability, maintainability, and availability. Funds are also required for maintenance items and newly developed improvements such as the AN/WSN-5 Inertial Navigation Sets for CG/CGN/DDG Class ships and the AN/SSQ-87(V) Hydrofoil Collision Avoidance and Tracking System.

Underway Replenishment Equipment (P-1 Line Item 18).

(\$ In Thousands)	
FY 1985	FY 1986
\$ 9,971	\$ 8,824

The equipment procured under this program is required to provide the Active Fleet with new or improved underway replenishment-at-sea capability. This equipment is used to transfer fuel, cargo, ammunition, and missiles by both alongside and vertical replenishment techniques. The equipment being procured is in support of the following objectives: personnel/equipment safety; reduction in maintenance costs; and reduction in alongside time, to minimize ship vulnerability to enemy action. Major equipment are air clutch winches, anti-slack devices, highline/ spanwire winches saddle winches, and elevator controllers.

Periscopes (P-1 Line Items 19-21).

(\$ In Thousands)	
FY 1985	FY 1986
\$23,525	\$25,257

These funds will provide for the procurement of the Type 18 Periscope related material and other periscopes and accessories. The Type 18 periscope equipment includes eyepiece boxes and masts to set up an inventory of these parts based on actual/predicted failure rates and turn around times, and automatic direction finding modifications. Funds are required to provide Submarine Satellite Information Exchange reception capability on Type 18 periscopes. Field change kits are being procured to implement approved

changes on previously procured Type 18 Periscopes. Equipment to provide additional shore/tender based components for other type periscopes also is required to ensure that an issuable periscope is always available as a replacement for damaged units on SSN-594 and 637 Class ships. This requirement is based on past demand experience and repair turn around time. The Type 8 Periscope Modification Program will enable the modification of Type 8 Periscopes to incorporate Electronic Surveillance Measure (ESM) capability on Fleet Ballistic Missile submarines. Funding will also provide for support and improvement of the Type 2 and 15 series periscopes for all Active Fleet submarines.

Other Shipboard Equipment (Ship Silencing) (P-1 Line Items 25-26).

(\$ In Thousands)	
FY 1985	FY 1986
\$23,100	\$32,820

The requested funds will provide for the procurement of equipment such as Glass Reinforced Plastic (GRP) Domes, electrical system mods, air reducing manifolds and noise/vibration monitor analyzers required to implement the militarily high priority Submarine Silencing Program on existing nuclear submarines and for the acoustic quieting of radiated noise and sonar self-noise for surface ships. The submarine silencing equipment incorporates technology developed under R&D programs for improving detection capability and reducing the detectability of the submarine. The surface ship silencing program will make use of the extensive silencing technology already developed under the Submarine Silencing program. FY 1985 and 1986 funding provides for the procurement of Masker Belts, Sonar Dome Baffles and Ship Service Turbine Generator Quieting Devices for FF-1052 Class ships; Orificial Resistive Devices, Masker Belts, and Sonar Dome Battles for DD-963 Class ships; Masker Belts for FFG-7 Class ships; PRAIRIE AIR for CVs AEs and AOs; and Compound Air Maskers for large combatants.

Other Shipboard Equipment (TRIDENT) (P-1 Line Item 28).

(\$ In Thousands)	
FY 1985	FY 1986
\$48,431	\$65,266

Funding in this program provides for hull, mechanical and electrical equipment for the TRIDENT Training Facility (TRITRAFAC) and the TRIDENT Refit Facility (TRIREFFAC) located at the Naval Submarine Base, Bangor, WA. Beginning in FY 1985 similar funding is requested to outfit the TRITRAFAC and TRIREFFAC to be located at Kings Bay, GA. The TRIREFFAC is a dedicated shore support facility providing a full range of industrial support. Unlike many other programs, TRIDENT does not use tenders for industrial support, but rather depends upon the TRIREFFAC for a full range of maintenance functions. The facility consists of a consolidated waterfront complex including refit piers, a drydock, a wharf for outloading explosive hardware and missiles, a magnetic silencing facility for measuring submarine magnetic field signature, and various industrial shops and warehousing facilities. Also included is funding for alteration/modification kits for training equipment and tactical test hardware. Specific items included in the budget request are determined by procurement leadtimes, installation and checkout periods and equipment operational need dates.

Other Shipboard Equipment (Deep Submergence) (P-1 Line Item 29).

(\$ In Thousands)	
FY 1985	FY 1986
\$14,324	\$12,802

The requested funds will provide for the procurement of hardware to improve/modify Deep Submergence Vehicles to provide the Navy with the capability to rescue personnel from craft disabled on the ocean floor. It also will improve the capability to perform manned underwater search, inspection and recovery missions.

Other Shipboard Equipment (Ship Support Improvement) (P-1 Line Items 31, 37, 38, and 43).

(\$ In Thousands)	
FY 1985	FY 1986
\$17,440	\$21,800

These programs will procure critical, long lead time equipments assemblies and components to support the maintenance-limited LO-MIX classes of ships after delivery, provide for improvement in the material condition of Engineered Operating Cycle ships, achieve increased operational availability, and provide funds to upgrade facilities both ashore and afloat (industrial plant and tenders) in order to improve and expand intermediate level maintenance by the surface forces. Shipboard maintenance will emphasize modular replacement with repairables being returned to Intermediate Maintenance Activities and Depot Overhaul Points for repair or rework and return to stock. Inherent in the Engineered Operating Cycle will be several intervening maintenance availabilities of extremely short duration for performing scheduled alterations and planned overhaul of installed equipment.

Other Shipboard Equipment (Minesweeping Equipment) (P-1 Line Items 32 and 34).

(\$ In Thousands)	
FY 1985	FY 1986
\$ 5,579	\$ 9,442

These programs will provide for extension of the useful service life of existing MSOs to FY 1991 and for the procurement of minesweeping cables necessary to counter moored and influence mines. Prior to the decision to defer the retirement of MSOs twenty-two of the twenty-five MSOs presently in the active Fleet were scheduled for retirement in FY 1985. These funds will procure field change modifications for incorporation into ships' support systems to decrease on-board and intermediate level maintenance requirements/costs. These funds will also procure Q-3 and S-3 cables; controllers; minesweep wire; rattlebars; and mine neutralization system vehicles, cables and modification kits.

Other Shipboard Equipment (Safety Equipment) (P-I Line Items 22, 39, and 41)

(\$ In Thousands)	
FY 1985	FY 1986
\$23,007	\$28,737

These funds supply shipboard personnel participating in fire fighting operations, fuel tank inspection, and other activities involving exposure of lungs to noxious substances with the latest available equipment in order to perform assigned tasks without risking personal injury; provide for the protection of personnel from exposure to nuclear weapons radiation; and provide ships of the active fleet with the capability to detect chemical warfare agents before ship contamination occurs. FY 1985 and FY 1986 funding will provide Halon 1301 Fire Fighting systems to complement the existing Aqueous Film Forming Foam/ Purple K Dry Chemical Powder hose reel systems in machinery spaces as well as procurement of this system in a mobile/portable form and Oxygen Breathing Apparatus Voice Amplifiers to improve communications between fire fighting team members; shielding which will be affixed to bulkheads and to cradles containing the individual weapons on CVs, SSN-688 Class, Non-FBM ASs and at shore facilities, and chemical warfare directional detectors and chemical agent point detector systems.

Other Shipboard Equipment (Miscellaneous) (P-1 Line Items 23, 24, 27, 30, 33, 35, 36, 40, 42, and 44).

(\$ In Thousands)	
FY 1985	FY 1986
\$84,145	\$190,826

These funds provide for the procurement of Combat System Command and Control Switchboards; equipment which will enable the Navy to comply with Federal law and DoD and Environmental Pollution Control regulations; replacement batteries for all active submersible craft/submarines; procurement and positioning of special equipment for merchant ships to provide them with the capability to perform Naval auxiliary roles; equipment to upgrade the air conditioning capacity on major combatants; provision of specialized equipment to assure reliable repair of electronic modules at selected shore, surface and subsurface Fleet activities; acquisition of energy conservation systems, equipment and modifications developed through the Chief of Naval Operation's Energy Research and Development program for installation aboard ships in the Fleet; the Gas Management System for installation on board submarines which will reduce the submarine's vulnerability; and modifications/replacements for all equipment that is not in a specific category and which cost less than \$900,000 by category.

Reactor Plant Equipment (P-1 Line Items 45 and 46).

(\$ In Thousands)	
FY 1985	FY 1986
\$396,155	\$590,000

The FY 1985 and 1986 requests provide funds for the procurement of replacement reactor cores, power units and other reactor plant components and equipment. Replacement cores and power units are the assemblies of nuclear fuel and necessary associated structural and reactivity control equipment required for the periodic refueling of nuclear powered ships. The procurement of these units is accomplished by the Department of Energy (DOE). The DOE has developed production lines within the civilian nuclear industry to fabricate these units. The funds requested are required to meet the refueling needs of the Navy in a manner most efficient to the government as recommended by the DOE. The Reactor component line item includes the components, equipment, and material required to provide minimum support needed for the continued safe and reliable operation of naval nuclear propulsion plants. Funds are programmed for acquisition of replacement components for ship alterations, initial and replenishment stock spare components, and specialized equipment necessary for refueling of nuclear powered ships.

Ocean Engineering (P-1 Line Items 47-49).

(\$ In Thousands)	
FY 1985	FY 1986
\$28,127	\$42,529

These programs provide for the procurement of equipment to support safely the existing depth capabilities imposed on the working diver as well as mission duration; equipment to improve the Navy's diving capabilities and maintain sufficient levels of critical salvage items; and improved equipment developed as part of Swimmer Support Systems for Underwater Demolition Teams, SEAL Teams and Inshore Undersea Warfare Groups. FY 1985 and FY 1986 funds will procure the MK14 Push - Pull System and the Deep Tool System; hardware which increases U.S. Navy operational surface supported maximum diving depth from 300 to 850 feet and salvage equipment such as hydraulic pullers, stato anchors, puller beach gearlegs, Reverse Osmosis Water Purification System, and synthetic line; and Low Influence Signature SCUBA, MK-VIII Swimmer delivery vehicle, gas transfer and storage systems, deck shelters, and rubber raiding craft.

Small Boats (P-1 Line Items 50-52).

(\$ In Thousands)	
FY 1985	FY 1986
\$25,939	\$44,652

Standard boats procured with these funds will be used to fill new or revised allowances, to replace obsolescent wooden boats now in service, and to replace boats of fiberglass or steel construction which are beyond economical repair. Types of boats to be procured with these funds include 26', 33' and 40' Personnel, 18', 22', 40' and 50' Utility, 26' Motor Whaleboat, 14' Punt, 35' and 50' Workboat, 24' EOD Craft, and 40' Plane Personnel and Rescue boat. Torpedo Retriever Procurement will acquire 100' retrievers used for recovering spent torpedoes, missiles, small drones and mobile targets fired during Weapons System Acceptance Test.

Training Equipment (P-1 Line Item 53 and 54).

(\$ In Thousands)	
FY 1985	FY 1986
\$ 3,781	\$29,694

This program provides equipments for the support of initial training requirements developed through the Navy Training Plan process and sustaining training requirements developed by the Chief of Naval Education and Training. This funding will also procure equipment for the construction of a CG-47/DD 963 Gas Turbine Operational facility.

Production Facilities Equipment (P-1 Line Items 55, 57 and 58).

(\$ In Thousands)	
FY 1985	FY 1986
\$31,827	\$27,159

These programs provide Industrial Plant Equipment and other plant equipment necessary to support Naval Sea Systems Command managed industrial facilities that are not industrially funded. Machine tools, industrial plant equipment and other plant equipment necessary to support Fleet operations, equipment for the TRIDENT Refit Facility, and calibration equipment for the intermediate and organizational maintenance levels are funded herein.

Spares and Repair Parts (P-I Line Item 59).

(\$ In Thousands)	
FY 1985	FY 1986
\$ 3,479	\$ 3,395

This program provides for the procurement of initial spares and repair parts required to support components installed on-board ships of the Active Fleet.

BUDGET ACTIVITY 2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(In Thousands)

BUDGET PLAN (Amounts for Procurement Actions Programmed)					
	1983 Actual	1984 Estimate	1985 Estimate	1986 Estimate	Justification Page
SHIP RADARS	172,104	129,421	171,386	208,528	23
SHIP SONARS (SURFACE SHIPS)	26,761	86,402	76,742	49,094	24
SHIP SONARS (SUBMARINES)	104,695	104,859	111,407	109,676	24
SHIP SONARS (GENERAL SUPPORT)	63,375	39,226	50,491	52,217	25
ANTI-SUBMARINE WARFARE ELECTRONICS (SURFACE SHIPS)	119,246	151,196	172,583	216,997	25
ANTI-SUBMARINE WARFARE ELECTRONICS (SUBMARINE)	10,494	14,026	5,269	15,844	26
ANTI-SUBMARINE WARFARE ELECTRONICS (AVIATION)	12,587	19,506	41,239	47,766	26
ANTI-SUBMARINE WARFARE ELECTRONICS (SURVEILLANCE)	121,409	89,038	90,951	125,626	27
ELECTRONIC WARFARE EQUIPMENT	33,378	51,013	114,936	243,072	27
RECONNAISSANCE EQUIPMENT	40,498	43,125	63,817	109,969	28
SUBMARINE SURVEILLANCE EQUIPMENT	139,661	10,869	15,332	27,875	28
OTHER SHIPBOARD ELECTRONIC EQUIPMENT	75,346	157,859	216,086	424,816	29
TRAINING EQUIPMENT	5,111	5,166	3,262	1,779	30
AVIATION ELECTRONIC EQUIPMENT	64,870	87,435	74,458	70,854	30
OTHER SHORE ELECTRONIC EQUIPMENT (COMM & CONTR)	25,105	18,037	19,689	51,918	31
OTHER SHORE ELECTRONIC EQUIPMENT (MISCELLANEOUS)	57,003	63,345	49,791	55,637	31
SHIPBOARD COMMUNICATIONS	46,656	66,638	72,189	80,294	32
SUBMARINE COMMUNICATIONS	31,128	18,687	45,522	88,723	33
SATELLITE COMMUNICATIONS	39,477	70,038	57,310	68,401	34
SHORE COMMUNICATIONS	36,679	31,644	50,274	97,158	34
CRYPTOGRAPHIC EQUIPMENT	108,236	113,102	159,029	189,663	35
CRYPTOLOGIC EQUIPMENT	13,424	12,802	14,396	21,714	36
OTHER ELECTRONIC SUPPORT	19,180	17,117	9,173	11,338	37
SPARES AND REPAIR PARTS	46,212	112,871	128,468	119,757	37
 TOTAL BUDGET PLAN	 \$1,412,635	 \$1,513,422	 \$1,813,800	 \$2,488,716	

Budget Activity 2: Communications and Electronic Equipment

	(\$ in Thousands)
FY 1986 Estimate	\$2,488,716
FY 1985 Estimate	\$1,813,800
FY 1984 Estimate	\$1,513,422
FY 1983 Estimate	\$1,412,635

Purpose and Scope of Work

Budget Activity 2 programs include the procurement of shipboard and shore communications and electronic equipment for the Active Fleet and training activities. Improved shipboard surface and air search radars are designed to enhance the military capability of combatant ships. Anti-Submarine Warfare Electronics equipment will furnish surface ships, submarines and special shore activities with equipment used for detection, tracking localization and classification of submarines. Special sonars are procured for employment in Fleet Ballistic Missile submarines. Also procured in this activity is equipment which will provide the Fleet the capability of deceiving, intercepting, and analyzing airborne, electro-magnetic and underwater radiation for the purpose of executing an effective surveillance and intelligence collection capability.

Justification of Funds:

Ship Radars (P-1 Line Items 60-67)

(\$ in Thousands)	
FY 1985	FY 1986
\$171,386	\$208,528

The FY 1985 and FY 1986 Ship Radar procurements provide the Active Fleet with detection, tracking and identification equipment to meet the challenge of high speed attack capabilities of low-flyers, anti-ship missiles and modern aircraft. Specific radars to be procured in FY 1985 and FY 1986 include the AN/SPS-67(V) radar (the modernized version of the AN/SPS-10 radar), the primary surface search radar in the Fleet (FY 1985 \$9.6 million; FY 1986 \$19.5 million); the AN/SPS-40 radar whose long-range goal is to increase the detection capability in hostile, cluttered, or low-flyer threat environments through improved system availability and automation techniques (FY 1985 \$14.9 million; FY 1986 \$23.6 million); the AN/SPS-48 radar, a three-coordinate air search radar whose primary function is to provide target position data to a weapon system (FY 1985 \$81.7 million; FY 1986 \$92.3 million); the AN/SPS-49 radar, a narrow beamed, very long-range two dimensional, air search radar (FY 1985 \$16.4 million; FY 1986 \$15.3 million); the Integrated Automatic Detection and Tracking System (AN/SYS-( ) which provides

the capability to correlate contact data from up to three radars, determine target tracks, and provide a single target output to the ship's command and decision system automatically (FY 1985 \$19.3 million; FY 1986 \$20.7 million); and the MK-23 Target Acquisition System, a rapid reaction, fully automatic, electronic counter-counter-measure capable radar system developed as the target acquisition system for the Improved Point Defense Surface Missile System (FY 1985 \$10.6 million; FY 1986 \$7.3 million). The FY 1985 and FY 1986 requests also include resources for procurement of various radar support items (FY 1985 \$18.8 million; FY 1986 \$29.9 million).

Ship Sonars (Surface Ships) (P-1 Line Items 68, 69 and 74)

(\$ in Thousands)	
FY 1985	FY 1986
\$76,742	\$49,094

\$12.7 million in FY 1985 and \$8.2 million in FY 1986 provide for procurement of AN/SQS-26 CX 153A sonar improvements. \$56.4 million in FY 1985 and \$32.9 million in FY 1986 provide for follow-on procurements of the AN/SQS-53B Shipboard Kits. \$7.6 million in FY 1985 and \$8.0 million in FY 1986 provide for procurement of emergency replacement windows and domes for the AN/SQS-26/53, AN/SQQ-23, AN/SQS-56 and AN/SQS-38 sonar systems.

Ship Sonars (Submarines) (P-1 Line Items 70-73 and 77)

(\$ in Thousands)	
FY 1985	FY 1986
\$111,407	\$109,676

These funds provide for continued procurement of AN/BQQ-5 modification kits required to upgrade previously procured and installed AN/BQQ-5 systems onboard SSN-594, SSN-637 and SSN-688 class submarines (FY 1985 \$94.8 million; FY 1986 \$95.0 million); procurement of a total of 27 BQQ-5 TB-16 towed arrays in FY 1984 thru FY 1986 utilizing a three year multi-year contracting approach (FY 1985 \$1.5 million, FY 1986 \$1.6 million); and procurement of AN/BQR-23 Improved Processors and Memory, AN/BQR-15 array modification shipalts, AN/BQQ-9 systems and various other alterations for installation on SSBN submarines (FY 1985 \$15.1 million; FY 1986 \$13.1 million).

Ship Sonars (General Support) (P-1 Line Items 75 and 76)

(\$ in Thousands)	
FY 1985	FY 1986
\$50,491	52,217

These funds procure upgrade equipment for the Transducer Repair Facilities including Towed Line Array (TLA) Plant Equipment for the TB-16, AN/SQR-18A(V)1, AN/SQR-18A(V)2, and AN/SQR-19; various BQR-20 series improvements; power supply kits for the AN/BQA-8; and engineering changes for the AN/BQS-14 including the upgrade of the Forward Look (FLU) portion of this sonar, AN/BQS-15, AN/BQR-7, AN/BQA-8B and AN/BQQ-3 systems (FY 1985 \$8.5 million; FY 1986 \$11.3 million). This request also includes resources to continue procurement of TR-317 (formerly TR-155) transducers for the AN/BSQ-11/12/13 and AN/BQQ-5 sonars for use on SSN-594, SSN-637 and SSN-688 class submarines; new TR-313 transducers (formerly TR-227( ) transducers) for the AN/SQS-26 sonar; and Electronic Scanning Switches required to support replacement of unreliable mechanical switches with electronic switches on both surface ships and submarines (FY 1985 \$42.0 million; FY 1986 \$40.9 million).

Anti-Submarine Warfare Electronics (Surface Ships (P-1 Line Items 80 and 84-87

(\$ in Thousands)	
FY 1985	FY 1986
\$172,583	\$216,997

The FY 1985 and FY 1986 resources provide for procurement and support of major ASW Electronics Systems for installation on surface ships. This request includes procurement of 62 AN/SLQ-25 (NIXIE) systems in FY 1985 and 25 systems in 1986 as well as 130 new Level Wind Mechanism kits (FY 1985 \$13.7 million; FY 1986 \$12.0 million); AN/SQR-17 performance improvements and AN/SKR-4 Data Link Modifications required to receive the new DIFAR/DICASS frequencies (FY 1985 \$8.9 million; FY 1986 \$18.7 million); improvements to increase the service life of the AN/SQR-15 Towed Array System (FY 1985 \$1.3 million; FY 1986 \$2.0 million); ten complete AN/SQR-19 systems with 19 AN/UYQ-21 full displays in FY 1985 and 14 AN/SQR-19 systems with five full AN/UYQ-21 full displays and four AN/UYQ-21 partial displays in FY 1986 (\$114.9 in FY 1985 and \$149.8 million in FY 1986); continued procurement of kits to upgrade the AN/SQR-18A system to the AN/SQR-18A(V)1 configuration and commence procurement of the AN/SQR-18(V)2 critical angle tow systems which employ the AN/SQR-19 hoist for installation on non-variable depth sonar ships (FY 1985 \$33.8 million); and continued procurement of both the AN/SQR-18A(V)1 and the AN/SQR-18(V)2 (FY 1986 \$34.5 million).

Anti-Submarine Warfare Electronics (Submarine) (P-1 Line Items 79, 81, and 82)

(\$ in Thousands)	
FY 1985	FY 1986
\$5,269	\$15,844

The Navy request includes \$4.9 million in FY 1985 and \$9.6 million in FY 1986 for Submarine Acoustic Warfare Systems (SAWS) which provide an enhanced survival capability for submarines to use against enemy torpedoes and a means to reduce the effectiveness of enemy sensors. These resources provide for procurement of AN/BLR-14/BQR-15 Interface Engineering Change and General Noise and Towed Systems in FY 1985 and FY 1986 and, commencing in FY 1986, Acoustic Device Countermeasure ADC MK 5 MOD 0. In FY 1986 \$5.8 million provides for initial procurement of Intermediate Maintenance Activity equipment for the Submarine Advanced Combat System (SUBACS). In addition, \$.4 million in FY 1985 and \$.4 million in FY 1986 are for the Acoustic Communications system, a multi-phase program that provides improved tactical acoustic communication systems for three primary Anti-Submarine Warfare platforms (aircraft, surface ships, and submarines).

Anti-Submarine Warfare Electronics (Aviation) (P-1 Line Items 89 and 90)

(\$ in Thousands)	
FY 1985	FY 1986
\$41,239	\$47,766

These funds will procure reliability and operability improvements to ADP equipment and will provide for first production of the UYQ-21 displays in FY 1985 as well as continued procurement of improvements to the Acoustic Analysis subsystem and the UYQ-21 displays in FY 1986. All of these are components of the Carrier ASW Module of the Carrier Combat Direction System (FY 1985 \$16.9 million; FY 1986 \$18.0 million). The request also includes resources to support procurement of various equipments to support the ASW Operations Center (ASWOC) (FY 1985 \$24.4 million; FY 1986 \$29.8 million).

Anti-Submarine Warfare Electronics (Surveillance) (P-1 Line Items 83 and 88)

(\$ in Thousands)	
FY 1985	FY 1986
\$90,951	\$125,626

These funds will support both the SOSUS and the SURTASS programs. Specific items to be procured in SOSUS include training hardware, general processing equipment for use at the Naval Oceanographic Processing Facilities (NOPFs), upgrade equipment, cable, Light Undersea Components (LUSC) and electronics for classified projects (FY 1985 \$84.3 million; FY 1986 \$100.1 million); The funds requested for SURTASS will procure two back-up arrays to replace operational arrays lost at sea (one in FY 1985 and one in FY 1986), Shore Electronic Equipment (four in 1986) and system improvements in FY 1986 to correct deficiencies which emerge during operational experience (\$6.7 million in FY 1985 and \$25.5 million in FY 1986).

Electronic Warfare Equipment (P-1 Line Items 91-100)

(\$ in Thousands)	
FY 1985	FY 1986
\$114,936	\$243,072

The FY 1985 and FY 1986 Electronic Warfare procurement provides the Fleet with systems that have the capability of detecting overt electromagnetic emissions through passive means. Specific systems to be procured include the AN/SLQ-32, a family of modular shipborne electronic warfare equipments to be installed in most combatants and auxiliaries in the surface Navy. \$65.9 million in FY 1985 will procure two AN/SLQ-32(V)2 systems, four AN/SLQ-32(V)3 systems and Electronic Warfare Improvements as follows: Expanded SLQ-32 Computer Memory, (V)3 Isolation Improvements, Direction Finding (DF), Accuracy Improvement (Band 1), Electronic Support Measures (ESM) Sensitivity Improvements (Band 1 and 3) and Band 3 ESM HAT. \$139.7 million in FY 1986 will procure six AN/SLQ-32(V)3 systems, and EW Mod Kits. The AN/SLQ-17 system is for use on CV and CVN class ships to offer a variable and effective defense against simultaneous multi-threat, multi-axis ASM attack. \$4.0 million in FY 1985 and \$6.0 million in FY 1986 are for ten AN/SLQ-17 Signal Processing/Low Power Amplifier (LPA) upgrades (four in FY 1985 and six in FY 1986) and Engineering Change Proposals (ECP's) to eliminate producibility problems. The AN/WLR-1 ( ) is a tactical ESM receiver for use on-board SSN and CV/CVN class ships. \$9.1 million in FY 1986 are for eight AN/WLR-1(H) (AN/WLR-1( ) upgrade) field change kits for SSN class ships and five Direction Finding (DF) Antenna Subsystems for CV/CVN class ships. The AN/WLR-8 is a tactical ESM receiver featuring signal analysis capabilities for use on-board SSN-668 class submarines. \$11.8 million in FY 1986 is for field change kits to upgrade existing AN/WLR-8(V)2 equipments. Fleet Electronic Warfare Support Group (FEWSG) provides a realistic air, surface, and subsurface threat environment for Fleet Training and support of Operational Test and Evaluation of Electronic Systems. \$1.0 million in FY 1985

and \$1.0 million in FY 1986 provide for procurement of signal density and power frequency enhancement for four AN/ULQ-13(V) vans. \$25.7 million in FY 1985 and \$5.9 million in FY 1986 are for procurement of AN/SLQ-34 systems, AN/SLQ-34 Improvements, AN/SKR-7, AN/SPS-48 Simulators and AN/SLQ-33 systems. \$1.2 million in FY 1985 and \$21.7 million in FY 1986 are for procurement of Scenario Generators, RADAR Jammer II Buoys, and E/F Band Simulators. \$9.1 million in FY 1985 and \$36.0 million in FY 1986 are for procurement of AN/ULQ-16 Video Processors, Reprogrammable Library terminals/processors/printers, Ships Signature Measurement Systems, upgrades to the Signals Warfare Support Center, Land Mobile systems, and Land Fixed Systems. \$5.7 million in FY 1985 and \$9.5 million in FY 1986 are for procurement of Chaff Buoys and Imitative Electronic Countermeasure equipments. \$2.2 million in FY 1985 and \$2.4 million in FY 1986 are for procurement of the AN/SSQ-82 (MUTE), a shipboard emitter monitor and control system.

Reconnaissance Equipment (P-1 Line Items 101-105)

(\$ in Thousands)	
FY 1985	FY 1986
\$63,817	\$109,969

These resources will provide the tactical capability to detect, locate and identify hostile targets at long range and to input this information into the ships Tactical Data System. \$34.0 million in FY 1985 and \$37.1 million in FY 1986 are for procurement of OUTBOARD Phase I and OUTBOARD Phase II suites. \$18.1 million in FY 1985 and \$25.6 million in FY 1986 are for procurement of COMBAT Direction Finder (DF). Additionally, this item provides Battle Group/Task Force Commanders with a Combat Cryptologic Support Console (CCSC) which distributes and displays tactical cryptologic data base information derived from signals exploitation functions within OUTBOARD, COMBAT DF, and Shore High Frequency (HF) DF network for long range targeting of Harpoon and Tomahawk. \$5.0 million in FY 1985 and \$4.6 million in FY 1986 are for procurement of Combat Cryptologic Support Consoles (CCSC). \$6.6 million in FY 1985 and \$15.9 million in FY 1986 are for procurement of equipment for intelligence centers for the Amphibious Assault Ships (LHA) and continued procurement of a new plotter for the Naval Intelligence Processing System (NIPS).

Submarine Surveillance Equipment Program (P-1 Line Items 106-113)

(\$ in Thousands)	
FY 1985	FY 1986
\$15,332	\$27,875

These resources provide special equipment to support submarine surveillance operations. \$5.5 million in FY 1986 is for procurement of automatic test equipment, repair test stations, and test program sets for the AN/WLQ-4(V) Depot \$13.0 million in FY 1986 is for procurement of four direction

finding subsystems of the AN/BRD-9 which allow improved performance of SSN-637 and SSN-688 class submarines against long range targets. \$2.9 million in FY 1985 and \$2.9 million in FY 1986 are for procurement of nine AN/BQH-5(V)4 Data Gathering Sets each for the SSN-637 class submarines. \$2.2 million in FY 1986 is for procurement of the first three AN/BQH-5(V)4 complete systems for the SSN-688 class submarines. \$1.4 million in FY 1986 is for procurement of 15 modifications to the existing AN/WLQ-4(V) installed on the SSN-637 class submarines. \$8.3 million in FY 1985 is for procurement of five AN/BLD-1 Interferometer Direction Finding Systems. \$4.1 million in FY 1985 and \$2.9 million in FY 1986 are for procurement of unique equipments that are maintained in limited quantities at Submarine Surveillance Equipment Support Facilities for use onboard nuclear attack submarines as well as for procurement of improved power supplies in each fiscal year for AN/WLR-8(V)2 systems, and for the procurement of improved Radar Absorbent Material Kits for installation on nuclear submarines.

Other Shipboard Electronic Equipment (P-1 Line Items 114-124)

(\$ in Thousands)	
FY 1985	FY 1986
\$216,086	\$424,816

\$111.2 million in FY 1985 and \$133.8 million in FY 1986 provide for procurement for such items as improvements to the Navy Tactical Data System (NTDS) which permits major warships rapid integration of ship sensor information, analysis and display of tactical information and designation of weapon systems to force threats. \$81.3 million in FY 1985 and \$248.9 million in FY 1986 are for electronic equipment for the TRIDENT Training Facility (TRITRAFAC) and the TRIDENT Refit Facility (TRIREFFAC). \$11.7 million in FY 1986 is for procurement of five AN/WQN-1(V) Channel Finder Systems and associated equipments. In addition, \$1.7 million in FY 1985 and \$3.2 in FY 1986 are for procurement of 135 new state-of-the-art OMEGA receiving sets (LTN-211). This request also includes resources to support procurement of equipment for the Armed Forces Radio and Television Service (AFRTS) which operates radio and television outlets for the shipboard information, training and entertainment of United States servicemen and their dependents at sea or abroad (FY 1985 \$9.6 million; FY 1986 \$8.6 million). \$4.3 million in FY 1985 and \$4.1 million in FY 1986 are for procurement of mine hunting sonars for Minesweeping Boats (MSBs), route survey sonars for Oceangoing Minesweepers (MSOs), and precise navigation equipment. \$4.2 million in FY 1985 and \$5.5 million in FY 1986 are for procurement of shipboard and manpack receiver equipment for the NAVSTAR Global Positioning System (GPS) a joint service program to provide a continuous, world-wide three-dimensional positioning/navigation capability to the operational forces. \$3.7 million in FY 1985 and \$9.0 million in FY 1986 are for procurement of the AN/USQ-74, a Link 11 Data Terminal Set.

Training Equipment (P-1 Line Items 125-126)

(\$ in Thousands)	
FY 1985	FY 1986
\$3,262	\$1,779

The FY 1985 and FY 1986 requests are for procurement of equipment to satisfy initial training requirements developed through the Navy Training Plan process to give the Navy the capability to train officer, operator and maintenance personnel on new or significantly modified equipment for which no Navy training is currently available. It also satisfies requirements to expand the Navy training capability on existing equipment to meet heavier needs for trained personnel in the Fleet (FY 1985 \$3.3 million; FY 1986 \$1.8 million).

Aviation Electronic Equipment (P-1 Line Items 127-136)

(\$ in Thousands)	
FY 1985	FY 1986
\$74,458	\$70,854

The FY 1985 and FY 1986 requests for Aviation Electronic Equipment provide for procurement of electronic equipment to support Naval and Marine aviation shore activities, shipboard aircraft control equipment and secure identification systems. The Marine Air Traffic Control and Landing System (MATCAL) will provide a fully automatic air traffic control and landing system. \$32.7 million in FY 1985 and \$16.6 million in FY 1986 are for procurement of three command and control subsystems in FY 1985, two Air Traffic Control (ATC) subsystems in each fiscal year, plus replacement equipment for the AN/TSQ-18. The Tactical Electronic Reconnaissance Processing and Evaluation System (TERPES) will process data obtained by the EA-6 aircraft to provide mission planning and briefing support. \$2.4 million in FY 1985 is for procurement of a Reserve Unit system. The Shipboard Air Traffic Control (SATC) program will improve air traffic control operations in the Fleet. SATC funding includes \$9.7 million in FY 1985 and \$14.2 million in FY 1986 for procurement of twelve AN/SPN-43 solid state radar field changes for CV/CVNS to improve reliability and safety of operational AN/SPN-43As, \$9.0 million in FY 1985 and \$6.8 million in FY 1986 for procurement of modification kits to correct deficiencies and enhance flight safety of Aircraft Carrier Landing Systems (ACLS) AN/SPN-41s and AN/SPN-42s, and \$3.1 million in FY 1985 and \$4.9 million in FY 1986 for procurement of 33 Tactical Air Navigation (TACAN) systems for Navy ships. The Air Station Support Equipment program addresses air traffic control requirements and enhances flight safety at Navy and Marine Corps Air Stations. The Air Station Support Equipment budget request includes \$10.2 million in FY 1985 and \$19.2 million in FY 1986 for 23 Brite Alpha Numeric Display Systems (BRANDS), nine Fiber Optic Cable Systems, 40 Flight Data Input/Output (FDIO) systems, various communications items; \$1.7 million in FY 1985 and \$4.7 million in FY 1986 for Satellite Communications (SATCOM) capability, correction of known deficiencies, modernization of the Fleet Area Control

and Surveillance Facilities (FACSFACS) and air search radar capability; \$2.7 million in FY 1985 and \$1.5 million in FY 1986 for procurement of 35 position recorders for each Programmable Indicator Data Processor (PIDP) DD-152 display for operational Radar Air Traffic Control Facilities (RATCF); \$2.9 million in FY 1985 and \$2.8 million in FY 1986 for procurement of a variety of field changes required to correct deficiencies in the Air Traffic Control Radar Beacon, Identification Friend or Foe, MK XII Systems (AIMS).

Other Shore Electronic Equipment (Command and Control) (P-1 Line Items 137-140)

(\$ in Thousands)	
FY 1985	FY 1986
\$19,689	\$51,918

These funds will procure electronic equipment for timely replacement of obsolete equipment of the Navy Space Surveillance System, and unalerted real-time detection of non-radiating satellites and other objects which pass through multistatic continuous wave radar beams (FY 1985 \$.2 million; FY 1986 \$3.1 million). This request includes resources to support the Space System Processing System procurement of special computer hardware and software necessary to improve information processing and generation of highly classified reports for use by Operational Navy Commands (FY 1985 \$2.3 million; FY 1986 \$2.1 million). The Navy Command and Control System (NCCS) Ashore program provides for the coordination and integration of shore based command centers and their respective systems; resources will procure three Intelligence Support Groups (FY 1985), eight Operational Support Groups (five in FY 1985 and three in FY 1986), fifteen Data Base Management Systems (FY 1986), communications replacement hardware and hardware for CINCLANTFLT Milcon Project (P-142) (FY 1985 \$16.7 million; FY 1986 \$46.1 million). \$.4 million in FY 1985 and \$.6 million in FY 1986 also provide for procurement of Radar System Simulation Units for the Multiple Unit Link Eleven Test and Operational Training System (MULTOTS), a transportable system to validate Link II interoperability on Tactical Data Systems equipped ships and aircraft.

Other Shore Electronic Equipment (Miscellaneous) (P-1 Line Items 141-147)

(\$ in Thousands)	
FY 1985	FY 1986
\$49,791	\$55,637

\$6.7 million in FY 1985 and \$7.9 million in FY 1986 are for the Radiation Detection Indication and Computation Equipment Program (RADIAC) which procures instruments to detect and measure nuclear and ionizing radiation and convert these measurements into meaningful terms so that Navy personnel can adequately control personnel exposure to those radiations. \$1.7 million in FY 1985 and \$1.6 million in

FY 1986 are for the continuing procurement of advanced, state-of-the-art electronic Intrusion Detection Systems (IDS) as part of the Navy's continuing efforts to improve the physical security of storage sites for both nuclear weapons and Arms, Ammunition and Explosives (AA&E) weaponry. \$25.0 million in FY 1985 and \$28.0 million in FY 1986 are for the procurement of General Purpose Electronic Test Equipment (GPETE) for initial outfitting of new or modified Fleet and shore electronic equipments. \$7.2 million in FY 1985 and \$5.4 million in FY 1986 are for procurement of equipment required for the Integrated Combat System Test Facility (ICSTF) located at San Diego, California, the only permanent Navy test facility for integrated shipboard combat system certification and continuation engineering for modifications of combat systems in existing ships. \$4.2 million in FY 1985 and \$7.1 million in FY 1986 are for procurement of a new generation of signal generators and oscillator calibrators capable of calibrating up to 18 GHz to support test equipment for FFG-7 and DD-963 class ships and TRIDENT submarines and up to 40 GHz to support test equipment for SSN-637 and SSN-688 class submarines. \$3.5 million in FY 1985 and \$3.9 million in FY 1986 are for procurement of emergency field change kits and hardware devices to solve Electromagnetic Interference (EMI) problems in electronic systems and equipments throughout the operating forces. The FY 1985 and FY 1986 requests also include resources to support procurement of replacements for deteriorating and obsolete management equipments (FY 1985 \$1.5 million; FY 1986 \$1.8 million).

Shipboard Communications (P-1 Line Items 148-155)

(\$ in Thousands)	
FY 1985	FY 1986
\$72,189	\$80,294

\$9.7 million in FY 1985 and \$17.6 million in FY 1986 are for the High Frequency (HF) Shipboard Communications program to update the capabilities of the current HF Communications Systems. FY 1985 and FY 1986 funds will procure AN/URT-23 transmitters, R-1051 receivers, modification kits for the URT-23's, AN/TRQ-35 HF Sounders and AN/URA-17F Comparator-Converters. Also, FY 1986 funds commence procurement of the OA-9122/SRC antenna coupler group. \$17.6 million in FY 1985 and \$11.9 million in FY 1986 are for procurement of AN/WSC-3 (LOS) radios, an Ultra High Frequency (UHF) transceiver providing securable tactical voice communications aboard line-of-sight ships. \$8.5 million in FY 1985 and \$2.9 million in FY 1986 are for procurement of 16 AN/SRC-47 Flight Deck Systems which provide a secure voice communications system for key personnel involved in aircraft operational support functions. \$3.5 million in FY 1985 and \$4.2 million in FY 1986 are for procurement of portable specialized radios to support the unique air, sea and land environment of the Explosive Ordnance Disposal (EOD) and Navy Special Warfare (NSW) missions. \$19.0 million in FY 1985 and \$30.8 million in FY 1986 are for procurement of communication systems to automate message processing and distribution functions aboard ship. \$8.9 mil-

lion in FY 1985 and \$8.1 million in FY 1986 are for procurement of multicoupler interface components, antennas and various other items for the integration and completion of communication suites aboard ship. \$5.0 million in FY 1985 and \$4.9 million in FY 1986 are for procurement of upgraded communication packages for flag configured logistic support ships and equipment for the Military Sealift Command/Ready Reserve Fleet (MSC/RRF).

Submarine Communications (P-1 Line Items 156-163)

(\$ in Thousands)	
FY 1985	FY 1986
\$45,522	\$88,723

These resources will procure communications equipment for Command and Control of the Fleet Ballistic Missile (FBM) Submarine Forces. \$5.9 million in FY 1985 and \$37.3 million in FY 1986 are for procurement of the Extremely Low Frequency Communication Program (Project ELF), a shore-to-ship communications system which will provide the capability to communicate with submarines at speed and depth. \$2.4 million in FY 1985 and \$23.9 million in FY 1986 are for procurement of Low Frequency/Very Low Frequency (LF/VLF) communications hardware, upgrades and high efficiency amplifiers. \$3.8 million in FY 1985 and \$3.8 million in FY 1986 are for procurement of new precise frequency time standards. \$3.5 million in FY 1985 and \$7.3 million in FY 1986 are for procurement of Enhanced VERDIN processors. In addition, \$3.5 million in FY 1985 and \$5.9 million in FY 1986 are for procurement of the 1600 Chips Per Second (CPS) Kits, Minimum Essential Emergency Communication Network (MEECN) modules and noise reduction circuits. These requirements are part of the VERDIN VLF communications system. \$7.9 million in FY 1985 is for procurement of equipment to enhance the capabilities of the existing SSN-688 class radio room. \$1.2 million in FY 1985 is for the procurement of enhanced communications equipment for operation in deployed POSEIDON Submarine radio rooms. \$12.3 million in FY 1985 and \$9.3 million in FY 1986 are for procurement of Submarine Communications Equipment consisting of antennas, mast assemblies and buoyant cable antennas. \$5.0 million in FY 1985 and \$3 million in FY 1986 are for procurement of 125 on-line receivers for the Circuit Mayflower program. In addition, \$1.0 million in FY 1986 is for the Continuing Evaluation Program.

Satellite Communications (P-1 Line Items 164 and 165)

(\$ in Thousands)	
FY 1985	FY 1986
\$57,310	\$68,401

FY 1985 and FY 1986 Satellite Communications procurements provide for adequate command, control and communications with ships and aircraft through the Ultra High Frequency (UHF) and Super High Frequency (SHF) bands. \$57.3 million in FY 1985 and \$68.4 million in FY 1986 are for procurement of AN/WSC-3 SATCOM radio terminals, Demand Assigned Multiple Access (DAMA) systems, Officer in Tactical Command Information Exchange Subsystems (OTCIIXS) equipment, Surveillance Towed Array System (SURTASS) modems, Tactical Data Information Exchange Subsystems (TADIIXS), Shore gateway terminals, Front-End Processors for the Common User Digital Information Exchange Subsystem (CUDIIXS), Tactical Intelligence (TACINTEL) Communications terminals, KG 84A compatibility equipment, Special Intelligence Submarine Information Exchange Subsystems (SISSIXS), SSIXS II, SHF Adaptive Multiplexers, Burst Error Coders and Defense Satellite Communication System Interconnect Facilities (DSCS-ICF) equipment.

Shore Communications (P-1 Line Items 166-180)

(\$ in Thousands)	
FY 1985	FY 1986
\$50,274	\$97,158

\$1.7 million in FY 1985 and \$1.9 million in FY 1986 are for procurement of emergency generators and uninterruptable power systems (UPS) for installation at various Naval Communication activities worldwide. \$16.7 million in FY 1985 and \$17.6 million in FY 1986 are for procurement of equipment and field change kits to replace obsolete High Frequency (HF) assets used to enable Naval Telecommunications to be viable in the absence of satellite communications. \$27.0 million in FY 1986 is for procurement of Unit Level Circuit Switches (ULCS) and Advanced Narrowband Digital Voice Terminals (ANDVT). \$3.0 million in FY 1985 and \$4.6 million in FY 1986 are for procurement of automated/semi-automated test equipments and manual upgrade components of the Defense Communication System (DCS) Technical Control Improvement Program (TCIP). \$2.9 million in FY 1985 and \$6.1 million in FY 1986 are for procurement of Ashore Mobile Contingency Vans (AMCC), a transportable platform for deployment to provide contingency communications. \$2.8 million in FY 1985 and \$5.2 million in FY 1986 are for procurement of replacement and upgrade of microwave facilities in the worldwide Defense Communication System (DCS). \$6.1 million in FY 1985 and \$3.9 million in FY 1986 are for procurement of the Defense Data Network (DDN). \$2.7 million in FY 1985 and \$12.7 million in FY 1986 are for procurement of Local Digital Message Exchange (LDMX) terminals, Naval Communications Processing and Routing System terminals, Remote Information Exchange Terminals (RIXT) and Automatic Digital Network (AUTODIN) Standard Remote Terminals (SRT). \$5.6

million in FY 1986 is for procurement of Military Sealift Command (MSC) forces office communications equipment. \$4.2 million in FY 1986 is for procurement of Voice Frequency Carrier Telegraph (VFCT) systems. \$5.4 million in FY 1985 and \$3.7 million in FY 1986 are for procurement of low dollar value items to support numerous Naval Shore Telecommunications programs. \$9.0 million in FY 1985 and \$5.6 million in FY 1986 are for procurement of headquarters level highly portable satellite communications equipment to support certain components of the Rapid Deployment Joint Task Force (RDJTF).

Cryptographic Equipment (P-1 Line Items 181-201)

(\$ in Thousands)	
FY 1985	FY 1986
\$159,029	\$189,663

The FY 1985 and FY 1986 requests will procure sufficient secure voice equipment to provide secure voice protection to an additional share of Navy's identified critical narrowband/wideband secure voice requirements. \$34.4 million in FY 1985 and \$32.2 million in FY 1986 are for procurement of the Single Audio System (SAS), a system where all shipboard radio voice subscribers have access to either a plain or cryptographically covered circuit, on an as required and programmed basis. The SAS will provide manual voice switching suites for smaller ships and an automated switching suite for larger ships requiring a switching capacity exceeding that provided by the manual switching. Both switching systems utilize a switch which is modularly expandable to suit the needs of various platforms. \$23.8 million in FY 1985 and \$13.1 million in FY 1986 are for procurement of TSEC/KY-71/72 equipments which will provide subscriber expansion and improvement over the secure voice capability presently provided by AUTOSEVOCOM I. New features include digital transmission, end to end secure voice with conferencing, better voice quality, and lower bit rate. \$29.5 million in FY 1985 and \$31.9 million in FY 1986 are for procurement of the TSEC/KG-84, a general purpose key generator capable of satisfying a wide variety of requirements and which should serve as the future standard link encryption device for low to medium speed record and/or data systems. \$21.8 million in FY 1985 and \$22.6 million in FY 1986 are requested for TSEC/KY-57/58, a wideband, push-to-talk (half-duplex) tactical speech security equipment for use in VHF/UHF communications. \$5.6 million in FY 1986 is for procurement of the TSEC/KY-65/75, a secure voice equipment designed to provide push to talk (half duplex) speech security for a variety of HF applications, primarily tactical radio. \$5.2 million in FY 1986 is for procurement of the TSEC/KYV-5, the Cryptographic module for the Advanced Narrowband Digital Voice Terminal (ANDVT) which satisfies requirements for secure narrowband communications which cannot be met by existing equipment. \$14.4 million in FY 1985 and 21.1 million in FY 1986 are for procurement of the TSEC/KW-46 which will secure record and data communications for the Navy Fleet Broadcast System. \$5.5 million in FY 1985 is for procurement of the TSEC/KG-72/KGV-14, a communications security portion of the Flight Deck Communications Program. The TSEC/KG-72/KGV-14 will secure base station and personal (helmet radio) communica-

tions, respectively, on ships that support aircraft. \$3.1 million in FY 1985 and \$6.7 million in FY 1986 are for procurement of the TSEC/KG-81, a full-duplex, high speed digital data encryption system for bulk encryption of the most vital DCS links. \$2.1 million in FY 1985 and \$1.7 million in FY 1986 are for procurement of the TSEC/KG-44 equipments for the Defense Meteorological Space Program. \$3.7 million in FY 1985 and \$5.5 million in FY 1986 are for procurement of the TSEC/KG-58/KGV-6, required to secure Marine Corps Ultra High Frequency Multi-Channel Communications in the Position Location and Reporting System (PLRS). \$11.8 million in FY 1985 and \$37.7 million in FY 1986 are for procurement of the TSEC/KY-67, a wideband push-to-talk (half-duplex) integrated secure Very High Frequency radio for the Marine Corps. The Marine Corps will employ the TSEC/KY-67 in tracked vehicles. \$4.8 million in FY 1985 and \$5.4 million in FY 1986 are for procurement of the TSEC/KGV-11, a general purpose communications security module designed for use with wide spectrum communications. \$2.0 million in FY 1985 and \$ .9 million in FY 1986 are for procurement of items of relatively low dollar value to meet special operational requirements. \$1.4 million in FY 1985 is for procurement of the TSEC/KL-51, a Rapid Automatic Cryptographic Equipment (RACE), designed for off-line encryption/decryption of record messages manufactured by a NATO country. \$ .7 million in FY 1985 is for procurement of TEMPEST test equipment.

Cryptologic Equipment (P-1 Line Items 202-208)

(\$ in Thousands)	
FY 1985	FY 1986
\$14,396	\$21,714

These resources provide equipment to support Tactical Cryptologic missions and functions. \$2.5 million in FY 1985 and \$4.1 million in FY 1986 are for procurement of Multi-User SI Comms (MUSIC) systems, Tactical Cryptologic Multiplexing (TCM) and Teletype Replacement Equipment. \$2.7 million in FY 1985 and \$6.3 million in FY 1986 are for procurement of AN/SSQ-80 (V1/V2) Tactical Electronic Support Measure (ESM) Subsystems, AN/SSQ-80 (V3) automated operator aids, AN/SSQ-80(V4) ELINT augment suites and High Frequency (HF) Receivers. \$2.6 million in FY 1985 and \$1.9 million in FY 1986 are for procurement of off-the-shelf items to support units in the Continental United States (CONUS). \$ .4 million in FY 1985 and \$1.6 million in FY 1986 are for procurement of reserve equipments. \$1.4 million in FY 1986 is for procurement of Radar HULTEC equipment. \$1.2 million in FY 1985 and \$2.1 million in FY 1986 are for procurement of cryptologic field trainers. \$5.0 million in FY 1985 and \$4.4 million in FY 1986 are for procurement of Shore Cryptologic Support Systems.

Other Electronic Support (P-1 Line Items 209 and 213)

(\$ in Thousands)	
FY 1985	FY 1986
\$9,173	\$11,338

These resources will procure critical repairable equipments to support planned maintenance schedules and corrective maintenance actions for the FFG (LO-MIX) and DD Engineering Operation Cycle (EOC) Class ships; and dedicated test stations, industrial plant equipment and test jigs and fixtures for selected depot rework facilities in support of the new maintenance strategies for the FFG and DDEOC Class ships (FY 1985 \$7.2 million; FY 1986 \$7.6 million). In addition, \$1.9 million and \$3.7 million are for procurement of communications, Radiac and ancillary equipments for Advanced Base Functional Components (ABFC's).

Spares and Repair Parts (P-1 Line Item 214)

(\$ in Thousands)	
FY 1985	FY 1986
\$128,468	\$119,757

FY 1985 and FY 1986 funds provide for procurement of interim, contractor-supported electronic parts and assemblies. The Systems Command and Project Managers procure interim repair parts (IRPs) to support certain equipments which will become operational prior to Navy provisioning by the Ships Parts Control Center (SPCC) (FY 1985 \$128.5 million; FY 1986 \$119.8 million).

Budget Activity 3: AVIATION SUPPORT EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(In Thousands)

Budget Plan (Amounts for Procurement Actions Programmed)					
	1983 Actual	1984 Estimate	1985 Estimate	1986 Estimate	Justification Page
SONOBUOYS	\$167,400	\$192,843	\$323,052	\$ 262,215	39
GENERAL PURPOSE BOMBS	6,644	144,832	270,410	307,910	40
AIR LAUNCHED ROCKETS	15,060	23,074	64,512	71,518	41
AIRCRAFT MACHINE GUN AMMUNITION	11,569	20,932	36,468	49,014	41
BIGEYE CHEMICAL WEAPON	-	-	19,712	21,580	42
GATOR	1,800	18,251	31,617	44,781	42
MISCELLANEOUS ORDNANCE AND SUPPORT	70,944	101,460	125,980	153,810	42
WEAPONS RANGE SUPPORT EQUIPMENT	50,935	25,379	33,572	48,360	43
AIRCRAFT LAUNCHING AND RECOVERY EQUIPMENT	18,487	21,621	35,328	25,640	43
AIRBORNE MINE COUNTER- MEASURES EQUIPMENT	16,253	10,756	16,125	32,522	44
LAMPS MK III SHIPBOARD EQUIPMENT	80,088	69,627	75,864	59,055	44
SPARES AND REPAIR PARTS	19,956	17,276	23,501	30,397	44
OTHER AVIATION SUPPORT	27,808	14,641	25,359	51,437	45
TOTAL BUDGET PLAN	565,944	660,692	1,081,500	1,143,249	

Budget Activity 3: AVIATION SUPPORT EQUIPMENT

(\$ in Thousands)

FY 1986 Estimate - \$ 1,142,240  
FY 1985 Estimate - \$ 1,081,500  
FY 1984 Estimate - \$ 660,602  
FY 1983 Estimate - \$ 565,044

Purpose and Scope of Work:

Budget Activity 3 finances the procurement of all air-delivered ordnance required for the Navy forces and Marine Air Wings, except guided missiles funded under the Weapons Procurement, Navy (WPN) appropriation. It also includes air launched, anti-submarine warfare (ASW) sensors, general support equipment associated with aircraft and other aviation support which includes ground electronics equipment, aircraft launching and retrieving equipment, photographic equipment, reconnaissance and electronic warfare processing and analysis equipment and miscellaneous other categories.

Justification of Funds:

Sonobuoys (Includes P-1 Line Item Nos. 215 - 224).

(\$ in Thousands)

FY 1985	FY 1986
323,052	262,215

The FY 1985 and FY 1986 Sonobuoy procurement has been computed considering the number of ASW carrier air groups and shore based ASW patrol squadrons to be supported, actual and projected peace-time usage for these forces and the necessary training allowance requirements. User aircraft include the S-3A, P-3, SH-2D, and SH-3 series. Specific sonobuoys to be procured in FY 1985 and FY 1986 include the AN/SSQ-36 Bathythermograph Sonobuoy an air dropped bathythermograph transmitting set that provides a vertical water temperature profile (FY 1985 \$8.4 million; FY 1986 \$3.8 million), the AN/SSQ-53 (DIFAR) a passive

directional sonobuoy used during the target localization phase of the Air ASW Mission (FY 1985 \$152.0 million; FY 1986 \$130.3 million), the AN/SSQ-57 (Special Purpose) Sonobuoy, a calibrated AN/SSQ-41 sonobuoy used to obtain acoustic and sound pressure level data and to measure ambient noise (FY 1985 \$2.7 million; FY 1986 \$2.9 million), the AN/SSQ-62 (DICASS) Sonobuoy, an active directional sonobuoy (FY 1985 \$52.1 million; FY 1986 \$43.5 million), the AN/SSQ-77 (VLAD) Sonobuoy, a passive directional sonobuoy utilizing a line array of omni-directional hydrophones and a DIFAR element. The directional beam patterns are formed from the line array to discriminate against noise and the DIFAR enables determination of the azimuthal bearing of detected sound (FY 1985 \$95.3 million; FY 1986 \$70.0 million), the AN/SSQ-71 (ATAC) Sonobuoy, a two-way acoustic communications sonobuoy (FY 1985 \$5.1 million, FY 1986 \$4.7 million), and the AN/SSQ-86 (DLC) Sonobuoy, a one-way acoustic communications sonobuoy (FY 1985 \$2.0 million, FY 1986 \$2.1 million). The FY 1985 and FY 1986 requests also include resources to support procurement of Signal Underwater Sound (SUS) devices and Sonobuoy Support Equipment required during production testing of sonobuoys and SUS devices.

General Purpose Bombs (P-1 Line Item Nos. 225 - 229, 234).

(\$ in Thousands)

FY 1985	FY 1986
270,410	202,910

These funds will procure the MK 83 thermally protected bomb, the MK-82 controlled fragmentation thermally protected bomb, the FMU-139/B electric fuze used on MK-80 series G. P. bombs, the MK 15/BSU-49 retard fin and the BSU-33 high drag mode fin both for the MK-82 General Purpose Bomb. \$22.1 million is requested in FY 1985 (\$7.2 million in FY 1986) for procurement of the MK-83 thermally protected General Purpose Bomb. In FY 1986 \$14.0 million will fund the procurement of the MK-82 controlled fragmentation thermally protected General Purpose Bomb. \$75.3 million in FY 1985 (\$82.3 million in FY 1986) will procure the FMU-139/B electric fuze. The remaining \$24.5 million in FY 1985 (\$30.7 million in FY 1986) is requested to procure various types of fins for these General Purpose Bombs as well as miscellaneous component parts and production support. \$14.3 million in FY 1985 (\$29.5 million in FY 1986) is for the procurement of SKIPPER, a Rocket Powered Standoff Laser Guided MK 83 Bomb. \$37.7 million in FY 1985 (\$22.2 million in FY 1986) is for PAVEWAY III Low Level Laser Guided Bomb Kits, which will be used to provide terminal guidance to the MK-82 general purpose bomb. \$32.4 million in FY 1985 (\$39.5 million in FY 1986) is for WALLEYE, an air-to-surface TV guided glide bomb. The FY 1985 WALLEYE funds will procure extended range (ER) and data link (DL) hardware for the conversion of WALLEYE I and II weapons to the ER/DL configuration. \$8.9 million

in FY 1986 for procurement of PMU-140 proximity fuzes to retrofit the existing inventory of ROCKEYE II MK 20 500-lb free fall cluster bombs. The Practice Bombs procurement is \$10.0 million in FY 1985 (\$10.6 million in FY 1986) for the MK-76 and MK-106 Practice Bombs, \$38.1 million (\$39.7 million in FY 1986) for the MK-80 series inert bomb, \$4.7 million (\$4.1 million in FY 1986) for Bomb Dummy Units (BDU-20C, BDU-24 and BDU-36 inert bombs) for nuclear training, \$2.4 million (\$2.4 million in FY 1986) for Cartridge Simulant Units (CXU-2 and CXU-3 smoke signals), \$5.1 million (\$8.8 million in FY 1986) for ROCKEYE Practice Bomb, and \$3.9 million (\$3.0 million in FY 1986) for miscellaneous component parts and production support services.

Air-Launched Rockets (P-1 Line Item Nos. 230 - 231).

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
64,512	71,518

\$39.0 million in FY 1985 and \$37.7 million in FY 1986 are for procurement of the air-to-ground Zuni 5.0" Wrap-around Fin Rocket system. \$25.5 million in FY 1985 and \$33.8 million in FY 1986 are for the 2.75" Folding Fin Rocket motor, (MK-56) and the WTU-1/B practice head.

Aircraft Machine Gun Ammunition (P-1 Line Item No. 233).

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
36,468	39,014

This category includes procurement of 20MM, 25MM, and 30MM ammunition used with various aircraft (A-4, A-6, A-7, F-8, F-14 and AV-8) gun systems. \$3.5 million in FY 1985 and \$5.9 million in FY 1986 are requested for procurement of 20MM practice gun ammunition used with various aircraft (A-4, A-6, A-7, F-8, and F-14) gun systems for fleet training to maintain pilot proficiency. \$17.9 million in FY 1985 (including \$3 million for containers) and \$20.2 million in FY 1986 (including \$5 million for containers) are requested for 25MM practice ammunition fired by the AV-8 (HARRIER) aircraft gun system. \$6.5 million in FY 1985 and \$6.5 million in FY 1986 is requested for 30MM service ammunition fired by the AV-8 (HARRIER) aircraft gun system. \$7.5 million in FY 1985 and \$5.2 million in FY 1986 is to procure 25MM HEI and API service ammunition for war reserve requirements for the AV-8. \$1 million in FY 1986 is to provide for the procurement of 25MM Dummy Ammo for gun system qualifications and acceptance tests. Included in this program is \$1.9 million in FY 1985 and \$1.9 million in FY 1986 for production/engineering support of the 20/25MM ammunition procurements. In addition \$1.2 million is provided in both FY 1985 and FY 1986 for 20MM/30MM ammunition pallets.

BIGEYE Chemical Weapon (P-1 Line Item Nos. 240-241).

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
19,712	21,580

The FY 1985 funds provide for low rate component production and assembly of the BIGEYE weapon. The BIGEYE is an air launched binary spray chemical bomb. It generates and delivers a persistent nerve agent from two non-toxic chemicals. The FY 1986 request provides for full-up bombs and the loading of FY 1985 funded bomb assemblies.

GATOR (P-1 Line Item No. 243).

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
31,517	44,781

The \$31.6 million in FY 1985 and \$44.8 million in FY 1986 are to procure GATOR CBU-78 500 pound bombs. The GATOR weapon consists of a MK-7 dispenser that contains a mixture of air-scatterable anti-tank and anti-personnel land mines.

Miscellaneous Ordnance and Support (P-1 Line Item Nos. 232, 235-239, 242, 244).

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
125,980	153,810

This procurement will include chaff decoy heads for electronic countermeasures, impulse cartridges, and other miscellaneous ordnance and support. \$11.5 million in FY 1985 and \$2.2 million in FY 1986 are requested for the Parachute Flare Program to procure the LUU-2B APF parachute flare. \$28.4 million in FY 1985 and \$30.0 million in FY 1986 are for the procurement of impulse cartridges used for ejecting air-launched weapons and other cartridge actuated devices. \$7.1 million in FY 1985 and \$8.1 million in FY 1986 are requested for rocket motors and catapults used for ejecting aircrewmembers from disabled aircraft. \$50.6 million in FY 1985 and \$82.7 million in FY 1986 are requested for procurement of airborne expendable countermeasures, including chaff, infrared flares and expendable jammers to meet training and war reserve

(mobilization) requirements. \$15.0 million in FY 1985 and \$16.5 million in FY 1986 are requested for JATO (Jet-Assisted Take Off) rockets used to launch aircraft and targets and to propel sleds used in testing. The remaining \$13.4 million in FY 1985 and \$14.3 million in FY 1986 are requested for miscellaneous ordnance, including such items as Marine Location Markers, Smokey SAM Simulator, and Defense Nuclear Agency Material.

Weapons Range Support Equipment (P-1 Line Item Nos. 245 - 248).  
(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
33,572	48,360

Procurements in FY 1985 include the following: (1) \$7.8 million for a Range Electronic Warfare Simulator (REWS) to be used for surface and air fleet Electronic Warfare (EW) training exercises; (2) \$7.4 million for Aircrew Electronic Warfare Ranges at Fallon, NV and Pinecastle, FL; (3) \$2.0 million for System Replacement and Modernization; (4) \$7.8 million for the Southern California area ASW Range-Phase I, and (5) \$2.1 million for Flight Termination/Command Control and Telemetry instrumentation to support Fleet Harpoon/Tomahawk over-the-horizon missile firings. Other range equipment requirements in FY 1985 total \$6.6 million. Procurements in FY 1986 include the following: (1) \$5.6 million for a Range Electronic Warfare Simulator (REWS) to be used for surface and air fleet Electronic Warfare (EW) training exercises; (2) \$5.6 million for Aircrew Electronic Warfare Ranges at Fallon, NV and Pinecastle, FL; (3) \$1.6 million for System Replacement and Modernization; (4) \$22.0 million for upgrading the East Coast Tactical Aircrew Combat Training System (TACTS) at Oceana, VA; (5) \$3.4 million for Surveillance Radar at Boardman, OR; and (6) \$5.7 million for Computer Modernization at PMRF. Other range equipment requirements in FY 1986 total \$4.5 million.

Aircraft Launching and Recovery Equipment (P-1 Line Item Nos. 249, 251 - 252).

(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
35,328	25,640

Catapult, Arresting Gear, and Visual Landing Aids Support for the Navy's aircraft carriers, and the Marine Corps' Expeditionary Airfield (EAF) systems are funded under this program. \$15.7 million in FY 1985 and \$5.9 million in FY 1986 are for EAF support equipment to correct known deficiencies, to modernize the EAF equipment to enhance maintainability, reliability and safety of flight operations, and to keep pace with advanced aircraft requirements. \$18.7 million in FY 1985 and \$18.8 million in FY 1986 are for the

procurement of major catapult, arresting gear and visual landing aids equipment for aircraft carriers and other aircraft capable ships. \$.9 million in FY 1985 and \$.9 million in FY 1986 provide for service change kits and other support equipment for airfield arresting systems.

Airborne Mine Countermeasures Equipment (P-1 Line Item No. 257).  
(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
16,125	32,522

This program funds various mine countermeasure equipments operated by RH/CH-53D helicopters. The funds requested procure the AQS/14 Minehunting Sonar (\$16.1 million in FY 1985) and the AN/ALQ-166 Countermeasures Set (\$32.5 million in FY 1986).

LAMPS MK III Shipboard Equipment (P-1 Line Item No. 258).  
(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
75,864	59,065

A multi-appropriation funded program, the LAMPS MK III shipboard equipment funded by OPN is that equipment which is to be installed in existing ships being backfitted with the LAMPS MK III weapon system. This equipment includes: (1) the AN/SQQ-28(V), an electronic sonar signal processing system; (2) the AN/SRQ-4, a shipboard terminal data transmission device; and (3) HLS, the shipboard helicopter landing system for the LAMPS MK III helicopter. Ten ship systems are budgeted in FY 1985 and seven in FY 1986.

Spares and Repair Parts (P-1 Line Item No. 263).  
(\$ in Thousands)

<u>FY 1985</u>	<u>FY 1986</u>
23,501	30,397

This item funds initial and replenishment spares. \$19.3 million in FY 1985 and \$25.6 million in FY 1986 are for initial spares, which are for the initial outfitting of end-items budgeted in Budget Activity #3. \$4.2 million in FY 1985 and \$4.8 million in FY 1986 are for procurement of replenishment, launch/recovery spares.

Other Aviation Support (P-1 Line Item Nos. 250, 253-256, 259-262).  
(\$ in Thousands)

FY 1985	FY 1986
25,368	51,437

This procurement will include Aircraft Rearming Equipment, Meteorological Equipment, Other Photographic Equipment, Survival Equipment, REWSON, Stock Surveillance Equipment, and Aviation Support Equipment - Miscellaneous. The Aircraft Rearming Equipment program provides armament support equipment (ASE) and weapons support equipment (WSE). ASE is equipment utilized ashore and afloat to load and/or download air launched weapons and to perform maintenance on aircraft installed armament systems. WSE equipment is used, ashore and afloat, to transport and perform maintenance on weapons and explosive ordnance components. ASE and WSE is utilized to accomplish the improved rearming rate (IRR) of A-6, EA-6, A-7, F-4, F-14, F-18, and AV-8 aircraft. The use of this equipment permits the rapid weapons loading and reloading of strike aircraft with a minimum number of flight deck personnel. The Meteorological Equipment program finances the procurement of meteorological equipment required by the Navy to gather worldwide weather data, and to rapidly disseminate weather information to Navy and Marine Corps users. The information provided is required for weather forecasting, flight safety and planning fleet operations. The Navy, in addition to providing specialized weather service peculiar to its needs, coordinates services with the DOD and civilian weather agencies. Meteorological equipment to be procured in both FY 1985 and FY 1986 includes equipment for the high-speed dissemination of weather information and miscellaneous equipment to monitor and report weather conditions at sea and shorebased activities. Other Photographic Equipment funds the procurement of photographic equipment for all Navy, shore and seaborne photographic laboratories plus various intelligence activities (\$1.6 million in FY 1985 and \$1.7 million in FY 1986). The Survival Equipment program will finance procurement of the PRC-103 Rescue Swimmer's Radios (\$1.9 million in FY 1986) and the PRC-90-1 Aircrew Survival Radio (\$1.3 million in FY 1986), for use by aircrewmembers. The Survival Equipment procurement includes \$.9 million in production support services. \$2.5 million in FY 1985 and \$2.4 million in FY 1986 is requested to buy equipment in support of the REWSON (Reconnaissance, Electronic Warfare, Special Operations and Naval Intelligence) Program. Procurement includes: (1) readout equipment for ship and shore reconnaissance squadrons, (2) surface and subsurface photocollection equipment, (3) analytical equipment to support these collectors and (4) equipment of a photographic and analytic nature for use by ship combatants. The Stock Surveillance Equipment line provides funds for procurement of equipment needed to monitor, measure, and assess the condition of current Navy stocks of air-launched missiles and air-launched ordnance and ammunition. 80% of the funds support missile inventory quality evaluation (surveillance) efforts and 20% support air-launched ordnance evaluation, including bombs, rockets, and cartridge actuated devices. Material readiness factors such as reliability and serviceability are measured by this effort. In addition, OPN Budget Activity (B.A.) #3 funds procurement of headquarters and field collateral equipment, fleet telemetry (TM) equipment and capital maintenance of real property (\$2.0 million in FY 1985 and \$6.1 million in FY 1986) within the Miscellaneous Aviation Support Equipment program.

BUDGET ACTIVITY: 4 ORDNANCE SUPPORT EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(In Thousands)

BUDGET PLAN  
(Amounts For Procurement Actions Programmed)

	FY 1983 ACTUAL	FY 1984 ESTIMATE	FY 1985 ESTIMATE	FY 1986 ESTIMATE	JUSTIFICATION PAGE
SHIP GUN AMMUNITION	\$113,664	\$154,097	\$235,069	\$380,761	47
SHIP GUN SYSTEMS EQUIPMENT	37,150	28,806	42,366	67,483	48
SHIP MISSILE SYSTEMS EQUIPMENT	252,580	327,831	470,585	725,322	48
FBM SUPPORT EQUIPMENT	51,006	61,178	106,855	149,084	49
ASW SUPPORT EQUIPMENT	68,636	119,900	94,816	162,904	50
OTHER ORDNANCE SUPPORT EQUIPMENT	28,616	24,193	30,643	37,814	51
OTHER EXPENDABLE ORDNANCE	84,495	111,718	146,273	203,058	52
SPARES AND REPAIR PARTS	58,819	73,481	102,993	117,391	53
TOTAL BUDGET PLAN	\$694,966	\$901,204	\$1,229,600	\$1,843,817	

Budget Activity 4: Ordnance Support Equipment

(\$ In Thousands)  
FY 1986 ESTIMATE - \$1,843,817  
FY 1985 ESTIMATE - \$1,229,600  
FY 1984 ESTIMATE - \$ 901,204  
FY 1983 ACTUAL - \$ 694,966

Purpose and Scope of Work

Funds provided in this budget activity are for Ship Gun Ammunition, Ship Gun and Ship Missile Systems Equipment, Fleet Ballistic Missile and Anti-Submarine Warfare Support Equipment, Other Ordnance Support Equipment, and Other Expendable Ordnance.

Justification of Funds

Ship Gun Ammunition (Includes P-1 Line Items 264-271)

(\$ In Thousands)  
FY 1985      FY 1986  
\$235,069      \$380,761

The FY 1985 request of \$235.1 million and FY 1986 request of \$380.8 million for Ship Gun Ammunition is for procurement of three-inch ammunition, five-inch ammunition, 20MM ammunition for the Close-In Weapon System (CIWS), 76MM ammunition, five-inch guided projectile, and sixteen-inch ammunition. The primary mission for three-inch ammunition is surface to surface warfare. The 76MM ammunition is for use primarily against air targets but is also for use against surface and shore targets. The sixteen-inch ammunition is for use by battleships against surface and shore targets. The five-inch guided projectile will provide precisely accurate naval gunfire against targets ashore and at sea, and can be fired from MK-42 and MK-45 five-inch/54 caliber gun mounts.

Ship Gun Systems Equipment (Includes P-1 Line Items 272-273)

(\$ In Thousands)	
FY 1985	FY 1986
\$42,366	\$67,483

The FY 1985 request of \$42.4 million represents \$22.4 million for Gun Fire Control Equipment and \$19.9 million for Coast Guard Gun Systems. In FY 1986, the request of \$67.5 million represents \$36.1 million for Gun Fire Control Equipment and \$31.4 million for Coast Guard Gun Systems. The funds requested for Gun Fire Control Equipment are for the procurement of equipment and ordnance alterations to improve reliability and maintainability of Surface Gun Fire Control Systems MK-86 and MK-68/56. The funds for Coast Guard Gun Systems procure two MK-92 Mod 1 Fire Control Systems in FY 1985 and three systems in FY 1986 to be installed on Modernized WHEC (Hamilton Class) Coast Guard vessels.

Ship Missile Systems Equipment (Includes P-1 Line Items 274-284)

(\$ In Thousands)	
FY 1985	FY 1986
\$470,585	\$725,322

The FY 1985 request of \$470.6 million and the FY 1986 request of \$725.3 million represent Ship Missile Systems programs. The MK-92 Fire Control System request of \$14.2 million in FY 1985 and \$48.4 million in FY 1986 will provide for improved readiness of the MK-92 system. The FY 1985 and FY 1986 requests of \$8.3 million and \$9.3 million respectively for Harpoon Support Equipment will be used to procure Ordnance Alterations including the Block 1C ORDAIT. The SMS ORDAIT: Area Defense (TERRIER) request of \$76.7 million in FY 1985 and \$89.0 million in FY 1986 will provide for Ordnance Alterations for the TERRIER "M" program to improve the MK-76 Guided Missile Fire Control System, CG/SM-2 Combat Systems improvements for the Fire Control System Modifications, and New Threat Upgrade improvements to the CG/SM-2 Combat System to provide for SM-2 (ER) Block II missile capability. The requests in FY 1985 and FY 1986 of \$113.6 million and \$134.5 million respectively for the SMS ORDAIT: Area Defense (TARTAR)

program represent improvements to the CGN/SM-2 Weapon System including Fire Control Radar Mods, Weapons Direction (WDS MK-14), AN/SYR-1 Downlink Receiver, and Ancillary Modifications; and, in FY 1986, a Guided Missile Launching System MK-13 Mod 4. The SMS AEGIS Area Self-Defense request of \$14.7 million in FY 1985 and \$12.7 million in FY 1986 will provide air defense of selected ships by upgrading the Point Defense Surface Missile System including modification to fire the RIM-7M Monopulse Missile, procurement of associated special test equipment and upgrading to incorporate specific improvements to increase reliability. The \$1.1 million requested in FY 1985 and \$1.1 million requested in FY 1986 for Airborne ECM/ECM will provide for equipment used to simulate projected enemy jamming tactics and techniques during Surface Warfare Systems ECM/ECM evaluations and Fleet exercises. The AEGIS Support Equipment request of \$29.7 million in FY 1985 and \$33.0 million in FY 1986 will provide shore based assets for the AEGIS Combat System Educational Center to support the battle readiness of AEGIS cruisers including: AEGIS Combat System Center equipment; and AEGIS Educational Center equipment. The Surface TOMAHAWK Support Equipment request of \$201.5 million in FY 1985 and \$146.1 million in FY 1986 will procure the Surface Vertical Launching System (VLS), Common Weapons Control Systems (CWCS), and Armored Box Launchers for surface ships. The FY 1985 request of \$10.8 million and the FY 1986 request of \$20.4 million for the Submarine TOMAHAWK Support Equipment program will procure modifications to the MK-117 Fire Control System for SSN 631 and 648 Class submarines to provide the platform necessary to launch the TOMAHAWK Cruise Missile.

FBM Support Equipment (Includes P-I Line Items 285-290)

(\$ In Thousands)	
FY 1985	FY 1986
\$106,855	\$149,084

The FY 1985 request of \$106.9 million represents \$42.3 million for TRIDENT Platform Support Equipment and \$64.6 million for Strategic Missile Systems Equipment. The FY 1986 request of \$149.1 million represents \$17.7 million for TRIDENT Platform Support Equipment and \$131.4 million for Strategic

Missile Systems Equipment. The funds requested for TRIDENT Platform Support equipment provide for procurement of ordnance support and training equipment required to outfit TRIDENT refit facility, and TRIDENT training facility at Kings Bay. The Strategic Missile Systems Equipment request provides for the procurement of non-flying weapon system support and training equipments necessary for the successful mission accomplishment of the POSEIDON (C-3), TRIDENT I (C-4), TRIDENT I Backfit (C-4 B/F), and TRIDENT II (D-5) programs.

ASW Support Equipment (Includes P-1 Line Items 291-295)

(\$ In Thousands)	
FY 1985	FY 1986
\$ 94,816	\$162,904

In FY 1985 this item completes the All Digital Attack Center (ADAC) basic procurement with the purchase of 3 systems for SSN 688-699 Class submarines and will continue the procurement in FY 1985 and FY 1986 of modifications required to support the ADCAP Torpedo and Over-The-Horizon targeting. In addition, FY 1985 and FY 1986 resources will support procurement of various up-grades to submarine and surface torpedo tube equipment, Anti-Submarine Rocket (ASROC) launchers, various test equipments, and procurement of equipment to support the MK-113 Mod 9 Improvement program. These funds will also support procurement of 8 MK-116 Mod 5/6 systems in FY 1985 and nine in FY 1986, as well as provide for the procurement of Anti-Submarine Warfare torpedo exercise and shore support equipment, range equipment for Fleet Operational Readiness Accuracy Check Sites (FORACS) and Sensor Accuracy Check Sites (SACS), and test equipment to support Weapon System Accuracy Trials (WSAT).

Other Ordnance Support Equipment (Includes P-1 Line Items 296-309)

(\$ in thousands)	
FY 1985	FY 1986
\$30,643	\$37,214

The FY 1985 request of \$30.6 million and the FY 1986 request of \$37.8 million for Other Ordnance Support Equipment are for various ordnance programs not budgeted under other sub-budget activities within this budget activity. Some of the major programs are: Explosive Ordnance Disposal Equipment, Unmanned Seaborne Targets, Stock Surveillance Equipment, and Ordnance Facilities Equipment. The request in both FY 1985 and FY 1986 for Explosive Ordnance Disposal Equipment provides for procurement of necessary EOD tools and equipment, required for both initial outfitting and replenishment of EOD units. These equipments provide ordnance location and safe disposal of unexploded ordnance. The request for Unmanned Seaborne Targets provides Surface Seaborne Targets for Fleet training, with procurement of Septar Targets and Floating Automatic Scoring Target (FAST) hulls beginning in FY 1985 and continuing in FY 1986. The request in FY 1985 and FY 1986 for Stock Surveillance Equipment provides resources for determining safety, reliability, readiness, and service/shelf life of both stored and deployed Navy and Marine Corps tactical weapons and weapon systems and the causes for their degraded state. Funds requested for Ordnance Facilities Equipment provide for the procurement of production related equipment at various Weapon Stations, Ordnance Stations, and Government-Owned Contractor Operated Plants. Other programs included in the FY 1985 and FY 1986 request are Swimmer Weapons Systems, Anti-Ship Missile Decoy System, Calibration Equipment, Energy Conservation, Other Ordnance Training Equipment, and Weapons Packaging and Handling.

Other Expendable Ordnance (Includes P-1 Line Items 310-316)

(\$ In Thousands)	
FY 1985	FY 1986
\$146,273	\$203,058

The Small Arms and Landing Party Ammo request in FY 1985 and FY 1986 provides ammunition in support of active naval vessels, and for active and reserve special warfare forces including replacement of Non-Combat Expenditure Requirements (NCER), initial allowance for all approved active and reserve forces, and a Combat Reserve and/or Material Pipeline of ammunition quantities based on "Days of Support". The FY 1985 and FY 1986 request for Pyro and Demo Material provides pyrotechnics and demolition materials for all active naval vessels, amphibious and mobile construction battalions, harbor clearance units, cargo handling and port groups, naval security groups, and naval special warfare groups. The QUICKSTRIKE request in FY 1985 and FY 1986 provides for the procurement of the 2000 lb MK-65 case and service and non-service mines including the MK-57 Target Detecting Devices (TDDs) and associated safety and arming devices. The request for Fleet Mine Support Equipment in FY 1985 and FY 1986 provides for the procurement of material and production support services for the assembly of mines in stockpile. The request also provides for support of Fleet proficiency training, mine warfare and mine countermeasures training, and improved stockpile mine performance. The Shipboard Expendable Countermeasures program provides for Anti-Ship Missile Decoys deployed from the MK-36 Decoy Launching System. The FY 1985 request provides for the Chaff Cartridge MK-182-1 and the FY 1986 request provides for SEA GNAT Decoys. Also included under Other Expendable Ordnance is \$6.6 million in FY 1985 and \$7.8 million in FY 1986 for Defense Nuclear Agency (DNA) material.

Spares and Repair Parts (Includes P-1 Line Item 317)

(\$ In Thousands)	
FY 1985	FY 1986
\$102,993	\$117,391

The funds requested consist of \$80.4 million in FY 1985 and \$90.5 million in FY 1986 for Initial Spare parts to support new end items, and \$22.6 million in FY 1985 and \$26.9 million in FY 1986 for replenishment spare parts consumed by the Fleet.

BUDGET ACTIVITY 5: CIVIL ENGINEERING SUPPORT EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(In Thousands)

Budget Plan (Amount for Procurement Actions Programmed)					Justification Page
	1983 Actual	1984 Estimate	1985 Estimate	1986 Estimate	
Passenger Carrying Vehicles	3,638	3,856	7,633	8,424	55
Trucks, Trailers, Construction and Maintenance Equipment	59,671	59,197	92,695	136,602	56
Amphibious Equipment and Combat Construction Support Equipment	6,732	40,623	96,697	150,068	57
Fleet Hospitals	72,828	58,200	71,856	79,218	57
Other Equipment	26,779	24,519	44,419	58,172	57
Total Budget Plan	169,648	186,395	313,300	432,484	

(\$ in Thousands)  
 FY 1986 Estimate - 432,484  
 FY 1985 Estimate - 313,300  
 FY 1984 Estimate - 166,395  
 FY 1983 Actual - 169,648

Budget Activity 5: Civil Engineering Support Equipment

Purpose and Scope of Work

Funds provided under this budget activity are for the procurement of passenger carrying vehicles, trucks and trailers, construction, earthmoving, maintenance, fire fighting, weight handling, amphibious and specialized equipment, combat construction support equipment, telephone equipment, mobile utilities support equipment, fleet moorings, collateral equipment for the initial outfitting of Military Construction Projects, pollution control equipment, and fleet hospitals. This equipment is procured for Navy-wide use by the Operating Forces and Shore Establishment exclusive of Industrial activities, except for general purpose passenger vehicles specifically excluded from the Industrial Fund Asset Capitalization Program. In addition, equipment used for construction of underwater facilities and public works shop equipment for three Construction Battalion Centers is provided for under this budget activity.

(\$ in Thousands)  

<u>FY 1985</u>	<u>FY 1986</u>
\$ 7,633	\$ 8,424

Passenger Carrying Vehicles - (P-1 Line Item 318 & 319)

This category provides for all Navy passenger carrying vehicles which include buses, sedans, armored sedans, and station wagons. The FY 1985 request will provide for the replacement of 652 vehicles out of a total projected inventory of 4,660 and 31 vehicles to augment the current inventory. The FY 1986 program will provide for the replacement of 544 vehicles out of a total projected inventory of 4,673 with limited augmentation. This category does not include ambulances which are addressed below.

(\$ in Thousands)	
<u>FY 1985</u>	<u>FY 1986</u>
\$92,695	\$136,602

Trucks, Trailers, Construction and Maintenance Equipment - (P-1 Line Items 320 - 328)

This category includes trucks, trailers, crushing equipment, drilling equipment, earth moving equipment, generators, fire fighting equipment and weight handling equipment for the Naval Construction Force, Naval Shore Activities, and various other Operational Forces. The FY 1985 funds requested will provide for the replacement and limited augmentation of 1,944 trucks (including replacement of 87 ambulances) out of a total inventory of 20,032. The FY 1986 program will provide for the replacement of 2,793 trucks out of a total inventory of 20,290 with limited augmentation. In earth moving equipment, 240 units will be replaced out of a total inventory of 3,186. The 1986 program provides for 450 units of earth moving equipment out of a total inventory of 3,293. In addition, \$13.9 million provides for replacement and limited augmentation of 76 units of weight handling equipment in FY 1985 and \$15.9 million for 84 units in FY 1986.

(\$ in Thousands)	
<u>FY 1985</u>	<u>FY 1986</u>
\$96,697	\$150,068

Amphibious Equipment (P-1 Line Item 329) and Combat Construction Support Equipment (P-1 Line Item 330)

These funds are required to provide the Fleet with equipment necessary to maintain a readiness to meet contingency requirements. Amphibious Equipment to be procured in FY 1985 will include causeway sections non-powered, causeway sections powered, side loadable warping tugs, elevated causeways, lighter aboard ship lift beams and tie downs, roll on/roll off discharge facilities and other miscellaneous amphibious specialized equipment. The Amphibious Equipment to be procured in FY 1986 will include offshore bulk fuel systems in addition to units of the same type of equipment procured in FY 1985. Included in the Amphibious Equipment request is \$40.7 million in FY 1985 and \$36.3 million in FY 1986 in support of the Maritime Prepositioned Ships program. Combat Construction Support Equipment consists of minor non-USN numbered equipment used primarily as facilities for support of Naval Construction Force personnel.

(\$ in Thousands)	
<u>FY 1985</u>	<u>FY 1986</u>
\$71,856	\$79,218

Fleet Hospital (P-1 Line Item 339)

The FY 1985 program funds are provided for one 500 Bed Combat Zone Hospital, one 500 Bed Communications Zone Hospital and one 1,000 Bed Communications Zone Hospital in support of the Rapid Deployment Joint Task Force. The FY 1986 Program provides for one 500 Bed communications zone and two 1,000 Bed Communications Zone Hospitals. The Combat Zone and Communication Zone Hospitals consist of shelters, transportation equipment, medical equipment and other hospital support equipment, and will provide medical care for Navy and Marine Corps Personnel during wartime.

(\$ in Thousands)	
<u>FY 1985</u>	<u>FY 1986</u>
\$44,419	\$58,172

Other Equipment - (P-1 Line Items 331-338 and 340-341)

Other programs in Budget Activity 5 include Collateral Equipment (FY 1985 \$28.2 million and FY 1986 \$33.6 million) which provides equipment and furnishings to initially outfit Military Construction projects and to replace investment items within the Navy Material Command for Personnel Support Facilities. The Mobile Utilities Support Equipment Program (FY 1985 \$2.5 million and FY 1986 \$3.0 million) provides electric power and high quality steam for cold iron support to the fleet, and power for emergency shore operations, serious utility system deficiencies and delayed military construction. Defense Switch Network (DSN) requirements necessitate procurement of digital switches to replace outmoded analog equipment that can no longer cope with the increased traffic (\$.5 million in FY 1985 and \$.6 million in FY 1986). Pollution control equipment (FY 1985 \$3.4 million and FY 1986 \$3.1 million) is for compliance with Clean Air Act and Clean Water Act Amendments, various Environmental Protection Agency Regulations and State Implementation Plans. Ocean Facilities Construction Equipment (FY 1985 \$1.3 million and FY 1986 \$1.3 million) is associated with strategic deterrence, anti-submarine warfare and other fleet underwater construction programs. Fleet Moorings (FY 1985 \$2.5 million) provides for two mooring systems in support of assault follow-on echelon ships of the Rapid Deployment Forces and Mooring Components to upgrade existing moorings which have inadequate holding capacity. The FY 1986 program (\$9.5 million) provides materials and components to upgrade fifty-eight deteriorated moorings at eight locations throughout the world. Other Civil Engineering Support Equipment (FY 1985 \$.3 million and FY 1986 \$.3 million) includes \$.2 million in FY 1985 and \$.2 million in FY 1986 for Public Works Shop Equipment, and \$.1 million in FY 1985 and \$.1 million in FY 1986 for specialized inspection equipment. Spares and Repair Parts (FY 1985 \$5.8 million and FY 1986 \$6.8 million) provides the initial outfitting of spares and repair parts for all Civil Engineering Support Equipment, addressed in this Budget Activity.

BUDGET ACTIVITY 6: SUPPLY SUPPORT EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(In Thousands)

Budget Plan

(Amounts for Procurement Actions Programmed)

	1983 Actual	1984 Estimate	1985 Estimate	1986 Estimate	Justification Page
Materials Handling					
Equipment and Systems	49,523	45,038	56,301	71,410	59
Productivity Programs	4,885	-	-	-	
Support Equipment	8,850	9,695	12,353	21,048	60
Classified Programs	24,564	51,632	61,446	51,496	60
 Total Budget Plan	 87,822	 106,365	 130,100	 143,954	

Budget Activity 6 - Supply Support Equipment

(\$ in Thousands)

FY 1986 Estimate - 143,954  
FY 1985 Estimate - 130,100  
FY 1984 Estimate - 106,365  
FY 1983 Actual - 87,822

Purpose and Scope of Work

This budget activity finances the procurement of forklift trucks and other materials handling equipment used at Navy installations and aboard ships, automated materials handling systems, investment type support equipment, productivity enhancing equipment, reprographics equipment, and pollution control equipment. In addition, financing for certain classified projects is included in this activity.

Justification of Funds

Materials Handling Equipment and Systems (P-1 Line Items Nos. 342-344)

(\$ in Thousands)

FY 1985	FY 1986
56,301	71,410

These funds are requested to procure forklift trucks in FY 1985 and in FY 1986 which are needed for the cyclical replacement of equipments which have exceeded their economic life in use aboard ships and at shore activities. These overage equipments are more costly to maintain than to replace. As of the end of the FY 1985 funded delivery period, 21 percent of the total inventory of forklift trucks will be overage, based on a standard life expectancy of 11 years. The 1975 through FY 1984 budgets provided the first ten increments of a phased plan for reducing the overage inventory to 20% ashore and zero afloat by the end of FY 1986. The original plan has been extended to FY 1987 due to funding limitations.

For other materials handling equipment the FY 1985 request represents the eleventh increment of a phased equipment replacement program to attempt to reduce the significant level of overage warehouse tractors, cranes and other equipment in the inventory. The requested FY 1985 program decreases the level of overage equipment in the inventory to 35 percent ashore and 16 percent afloat. Block obsolescence during the FY 1984 and FY 1985 periods prevents significant overage reduction. The FY 1986 program brings the overage position down to 29 percent ashore and 12 percent afloat.

The requested funds for the automated materials handling systems will provide for the installation of five Navy Integrated Storage Tracking and Retrieval Systems (NISTARS) in FYs 1985 and 1986. NISTARS automates certain warehouse functions and places the entire warehouse operation under positive management control and automation. It improves the efficiency of labor and materials, as well as improves inventory accuracy. These systems should produce sizeable savings as well as improve supply support responsiveness.

Support Equipment (P-1 Line Items Nos. 347 -348)

(\$ in Thousands)	
FY 1985	FY 1986
12,353	21,048

Support equipment provides for the replacement of investment-type equipment. Included are duplicating (quick copy) equipment and many types of shop and office equipment for which repairs are no longer feasible.

The request for pollution control equipment provides funds for six bulk fuel installations in FY 1986. These projects provide Navy fuel farms with a comprehensive monitoring and control system and alarms which will respond to significant fuel level changes, permitting rapid response to problems such as oil spills. As most fuel terminals are located in environmentally sensitive areas near large bodies of water, any oil spill would generate considerable adverse publicity and a costly clean-up effort.

Classified Programs (P-1 Line Items Nos. 349-354)

(\$ in Thousands)	
FY 1985	FY 1986
61,446	51,496

Details of these programs are of a higher classification. Justification is provided separately.

BUDGET ACTIVITY 7: PERSONNEL AND COMMAND SUPPORT EQUIPMENT  
SUMMARY OF BUDGET PLAN  
(IN THOUSANDS)

BUDGET PLAN  
(Amounts for Procurement Actions Programed)

	1983 Actual	1984 Estimate	1985 Estimate	1986 Estimate	Justification Page
TRAINING EQUIPMENT	45,958	87,978	108,715	127,035	62
COMMAND SUPPORT EQUIPMENT	85,345	96,491	134,369	151,847	63
COMPUTER ACQUISITION PROGRAM	67,242	76,939	264,526	283,618	64
PRODUCTIVITY PROGRAMS	29,516	18,519	20,890	6,497	65
TOTAL BUDGET PLAN	228,061	279,927	528,500	568,997	

Budget Activity 7 - Personnel and Command Support Equipment

(\$ in Thousands)

FY 1986	Estimate - 568,997
FY 1985	Estimate - 528,500
FY 1984	Estimate - 279,927
FY 1983	Actual - 228,061

Purpose and Scope of Work

This budget activity finances the procurement of Training Equipment, Command Support Equipment, Computer Equipment and Productivity Investment Programs.

Justification of Funds

Training Equipment (P-1 Line Items 355-378)

(\$ in Thousands)

FY 1985	FY 1986
108,715	127,035

Surface training devices will provide maintenance, operator, team, and refresher training for new combat systems/capabilities being introduced into the fleet. Requested funding supports a variety of cost effective devices and spare parts including Surface Sonar Trainers, Ship System Trainers and Surface Combat System Trainers.

The requested trainers in the sub-surface community will enhance capability to teach normal and emergency ship control procedures to improve skills and submerged ship handling proficiency; support land based training for submarine fire control/combat system attack center team training; provide simulated surfaced submarine piloting techniques; and provide a visual tactical targeting capability in submarine training attack centers to teach personnel to integrate information and make critical tactical decisions.

Initial outfitting of spares and repair parts for training equipment is needed to support equipment from the time the equipment is officially on line until full support responsibility can be assumed by the supply system for routine replenishment.

Funding is required to procure Training Support Equipment (TSE) consisting of minor training aids and devices and logistic support equipment to support the education and training programs to supply the fleet with effectively trained personnel.

Training Device Modifications provide cost-effective enhancements to update the existing inventory of training devices. The modifications help maintain the training value of devices and keep them compatible with equivalent changes made to the fleet operational equipments which these devices simulate.

Command Support Equipment (P-1 line Items 379-385)

(\$ in Thousands)	
FY 1985	FY 1986
134,369	151,847

This funding provides for procurement of general support equipment required by Active and Reserve Command Activities, not otherwise provided for within the appropriation structure. This includes administrative, educational, and financial support equipment.

This request includes equipment needed for the Naval Intelligence Command and its field activities. It is a part of the General Defense Intelligence Program (GDIP) requirements. Further information on this program is classified. Additional details on this procurement request are contained in the Intelligence Justification Books being provided separately.

The requested funds will also provide for procurement of general support equipment required by shore activities and forces afloat under command of the fleet claimants. Organizations funded include the Commanders-in-Chief, U.S. Atlantic and Pacific Fleets and the Commander-in-Chief, U.S. Naval Forces, Europe.

This request also includes the procurement of scientific, technical and related (undersea) survey equipment used by the Oceanographer of the Navy in the collection, processing, and analysis of acoustical, geophysical, bathymetric, and navigational data through coastal and deep ocean surveys. These surveys provide the data with which undersea craft, whether they be employed as strategic deterrent or anti-submarine forces, can precisely navigate without relying upon vulnerable electronic navigation systems.

Funds are requested for acquisition of medical and dental equipment in support of direct health care delivery. These funds will support 23 regional medical centers, 8 hospitals, 8 regional medical clinics, 6 branch hospitals, 23 regional dental centers, 10 specialized medicine units, 5 training facilities, and 2 Headquarters units which together with their branch facilities comprise 383 individual activities. Funds are requested to replace existing worn-out, obsolete assets and to provide for the acquisition of new technological developments for a modern health care delivery system. This request contains \$1.3 million to place Computer Assisted Tomography (CAT Scan) equipment at the Naval Hospital, Great Lakes, Illinois as an initiative under the Federal Health Resource Sharing Act to permit joint use by the Navy and the Veteran's Administration. This request also contains \$9.5 million to reduce the backlog of overaged medical and dental equipment awaiting replacement which totals \$18.1 million at the end of Fiscal Year 1984.

Computer Acquisition Program (P-1 Lines Items 386-394)

(\$ in Thousands)	
FY 1985	FY 1986
264,526	283,618

The Computer Acquisition Program (CAP) was established to optimize the procurement of general purpose Automatic Data Processing Equipment (ADPE) Navy-Wide. The procurement of ADPE through the CAP represents in most part the culmination of several planned and developed ADP systems that are ready for deployment and introduction throughout the fleet. The work load that is performed directly supports such day to day efforts as fleet supply and logistics, maintenance, financial, personnel management, and health management, all of which are currently either performed manually or in part by using old, obsolete, and unreliable data processing support. The automation and upgrade capability to be funded by the CAP would lighten the afloat and shore work loads and modernize ADP where such capabilities presently exist, hence directly improving overall fleet readiness. Additionally, the CAP request contains funds for the economic purchase conversion of currently leased ADPE.

The battle Group tactical training enhancement to the Naval War Gaming System provides interactive, multi-threat operational situations in a simulated, yet realistic operational environment, so that command and major staff officers can study, plan and exercise skills requiring tactical decisions. The system will provide a capability to evaluate proposed, new and/or existing U.S., Allied and Soviet tactics and doctrine. It will support major fleet exercise planning, work-up training, reconstruction and evaluation.

Productivity Programs (P-1 Line Items 395-397)

(\$ in Thousands)	
FY 1985	FY 1986
20,890	6,497

Funds requested for the Productivity Investment Fund are used to purchase, install and demonstrate improved general purpose equipment, tools and procedures. The objective of productivity investments is to apply capital investment in exchange for labor intensive and costly operations in government by investments in modern equipment, methods and labor saving devices. It also realizes a continuing stream of benefits through the reduction of recurring operating costs. Projects involve the replacement of old and outmoded equipment and procedures to reduce inefficiency and maintenance costs. This frequently implants new technology as well, enabling growth in efficiency and the solution of emerging problems in operations and logistics. The technology factor has been credited with at least 40% of all productivity growth over the past 5 decades of domestic experience.

The Productivity Enhancing Incentive Fund increases productivity and decreases operating costs at local commands by providing a means of direct and immediate acquisition of capital investment items. Attempts at investments for productivity improvement, particularly in areas with fast payback capital return potential, have traditionally been submerged due to administrative controls which preclude timely actions to exploit that potential. As a result, substantial gains in productivity were lost. To rectify this and to provide for productivity growth, OSD has directed the Navy to maintain a productivity enhancing investment account to fund fast payback capital investment proposals initiated by local commands. All projects will provide real savings to achieve payback within two years.

Over the past two decades, essential Navy capital investments in modern equipment, facilities and processes have not been made, and the ability of the Navy to internally support the full scope of its mission essential systems has eroded to an insufficient level. Productivity investments directly address the unfunded backlog of compelling investment opportunities existing in the Navy.

COMPARISON OF FY 1984 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1984 BUDGET WITH FY 1984 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1985 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per FY 1984 Budget	Program Requirements Per FY 1985 Budget	Increase (+) or Decrease (-)
1. Ships Support Equipment	717,314	666,538	-50,776
2. Communications and Electronics Equipment	1,672,680	1,513,422	-159,258
3. Aviation Support Equipment	815,867	660,692	-155,175
4. Ordnance Support Equipment	974,437	901,204	-73,233
5. Civil Engineering Support Equipment	230,435	186,395	-44,040
6. Supply Support Equipment	115,053	106,365	-8,688
7. Personnel and Command Support Equipment	361,715	279,927	-81,788
Reimbursable Program	40,000	40,000	-
Total Fiscal Year Program	4,927,501	4,354,543	-572,958

EXPLANATION BY BUDGET ACTIVITY

1. Ships Support Equipment (\$-50.8 Million)

The decrease of \$50.8 million resulted from the following: Congressional reductions of \$3.1 million associated with Other Propulsion Equipment, \$4.5 million associated with Torpedo Retrievers, and \$.2 million associated with consultants, studies and analyses; and a Congressionally mandated undistributed general reduction of \$49.0 million to limit cost growth. These decreases are offset by a planned transfer in of \$6.0 million to the Production Facilities account.

2. Communications and Electronic Equipment (\$-159.3 Million)

The net decrease of \$159.3 million is due to the following adjustments: Congressional reductions of \$7.5 million for the BQQ-5 Sonar, \$1.6 million for Integrated Cover and Deception (ICAD) Systems and \$1.4 million for Ships Signal Exploitation Space (SSES) as well as Congressionally mandated general reductions of \$137.5 million for cost growth, \$9.0 million for spares and repair parts, and \$2.3 million for consultants, studies and analyses.

#### EXPLANATION BY BUDGET ACTIVITY

##### 3. Aviation Support Equipment (\$155.2 Million)

The FY 1984 column of the FY 1985 President's Budget Request reflects a \$155.2 million decrease from the total program requirements reflected in the FY 1984 President's Budget Request. Congressional reductions were made to the following programs: AN/SSQ-77 (\$15.2 million), General Purpose Bombs (\$5.0 million), Laser Guided Bombs (\$5.9 million), Machine Gun Ammunition (\$5.5 million), Practice Bombs (\$11.5 million), Cartridges and Cartridge Actuated Devices (\$4.5 million), JATOS (\$4.3 million), GATOR (\$6.2 million), Miscellaneous Survival Equipment (\$16.5 million), and Mine Countermeasures (\$8.0 million). In addition, Congressional disapproval of AN/SSQ-62 multiyear acquisition strategy resulted in a net decrease of \$49.2 million. Undistributed Congressional reductions for cost growth, spares and repair parts and consultants, studies, and analyses resulted in reductions of \$10.0 million, \$1.5 million and \$.8 million, respectively. The FY 1984 program is also reduced by an anticipated transfer out of \$11.0 million.

##### 4. Ordnance Support Equipment (\$-73.2 Million)

The FY 1984 program has decreased by \$73.2 million from the \$974.4 million requested in the FY 1984 budget to the \$901.2 million reflected in the FY 1984 column of the FY 1985 request. Congress deleted \$4.1 million requested for 5 Inch/54 Ammunition. Additionally, Congress specified undistributed general reductions for cost growth (\$62.0 million), Spares (\$6.4 million), an consultants, studies, and analyses (\$.7 million).

##### 5. Civil Engineering Support Equipment (\$44.0 Million)

The net decrease of \$44.0 million is attributed to the following adjustments: Congressional reductions of \$7.0 million for Earth Moving Equipment, \$15.1 million for Amphibious Support Equipment, \$4.1 million for Collateral Equipment, and \$11.9 million for Fleet Hospitals; minor reprogramming of \$0.7 million; and Congressionally mandated general reductions of \$6.0 million. In addition, a planned increase of \$0.7 to Fleet Hospitals is reflected in the FY 1984 column of the FY 1985 President's Budget.

##### 6. Supply Support Equipment (-\$8.7 Million)

The decrease to the FY 1984 column results from the following: Congressionally imposed reductions of \$4.7 million to Supply Test Equipment and Congressionally imposed general reductions of \$4.0 million.

EXPLANATION BY BUDGET ACTIVITY

7. Personnel and Command Support Equipment (-\$81.8 Million)

The decrease results from the following: specific Congressional reductions of \$3.0 million for Training Support Equipment, \$1.6 million for Naval Reserve Support Equipment, \$2.3 million for the Operating Forces Support Equipment, \$6.2 million for the Medical Support Equipment, \$2.2 million for Environmental Support Equipment, \$30.0 million for the Computer Acquisition Program, and \$47.5 million for Manufacturing Technology. There are minor adjustments of \$0.8 million reflected, as well as the planned transfer of \$11.8 million into Operating Forces Support Equipment.

Comparison of FY 1984 Financing As Reflected  
In FY 1984 Budget With FY 1984 Financing As  
Shown In FY 1985 Budget

(In Thousands of Dollars)

	Financing Per FY 1984 Budget	Financing Per FY 1985 Budget	Increase (+) or Decrease (-)
Program requirements (Total) . . . . .	4,927,501	4,354,543	-572,958
Program Requirements (Service account) . . . . .	4,887,501	4,314,543	-572,958
Program Requirements (Reimbursable) . . . . .	40,000	40,000	. . . . .
Less:			
Anticipated Reimbursements . . . . .	40,000	40,000	. . . . .
Reprogramming from prior year budget plans. . . . .	. . . . .	. . . . .	. . . . .
Unobligated balance available from prior year to finance new budget plans . . . . .	. . . . .	. . . . .	. . . . .
Transferred from other accounts. . . . .	. . . . .	6,000	+6,000
Add:			
Reduction pursuant to P.L. 97-377. . . . .	. . . . .	. . . . .	. . . . .
Unobligated balance available to finance subsequent year budget plans . . . . .	. . . . .	. . . . .	. . . . .
Transferred to other accounts. . . . .	. . . . .	. . . . .	. . . . .
Appropriation. . . . .	4,887,501	4,308,543	-578,958

Explanation of Changes In Financing

1. Program Requirements (TOTAL).

This is the total change in the value of the FY 1983 program since submission of the Amended FY 1984 budget.

-572,958

2. Program Requirements (Service Account).

-572,958

The decrease in program requirements represents the net effect of inter-appropriation transfer.

3. Transferred from other Accounts

+6,000

The increase reflects a transfer from the SCN appropriation.

4. Appropriation

-578,958

The net decrease reflects the net effect of inter-appropriation transfers and transfers from other accounts.

COMPARISON OF FY 1983 PROGRAM REQUIREMENTS AS REFLECTED  
IN FY 1984 BUDGET WITH FY 1983 PROGRAM REQUIREMENTS AS  
SHOWN IN FY 1985 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per FY 1984 Budget	Program Requirements Per FY 1985 Budget	Increase (+) or Decrease (-)
1. Ships Support Equipment	530,097	533,599	+3,502
2. Communications and Electronics Equipment	1,409,789	1,412,635	+2,846
3. Aviation Support Equipment	537,620	565,944	+28,324
4. Ordnance Support Equipment	694,534	694,966	+432
5. Civil Engineering Support Equipment	172,576	169,648	-2,928
6. Supply Support Equipment	81,224	87,822	+6,598
7. Personnel and Command Support Equipment	227,435	228,061	+626
Reimbursable Program	40,000	77,016	+37,016
Total Fiscal Year Program	3,693,275	3,769,691	+76,416

EXPLANATION BY BUDGET ACTIVITY

1. Ships Support Equipment (\$+3.5 Million)

The \$3.5 million increase reflected above is the net result of below threshold reprogramming actions.

2. Communications and Electronic Equipment (\$+2.8 Million)

FY 1983 funding for Communications and Electronic Equipment has increased by \$2.8 million since submission of the FY 1984 President's Budget Request. Planned transfers out of the appropriation were reduced by \$14.0 million in order to increase funding for TSEC/KY-71 (STU II) equipment. Funding for the BQQ-5 program was reduced by \$4.8 million in order to provide funds to the RDT&E,N appropriation for the SSN-688 Class Vertical Launch System development effort. The AN/SLQ-17 program was reduced by \$7.5 million as an offset for the military pay reprogramming requirement. Other below threshold reprogramings account for the remaining net increase of \$1.1 million.

#### EXPLANATION BY BUDGET ACTIVITY

3. Aviation Support Equipment (\$+28.3 million)

The FY 1983 program increased by \$28.3 million, largely as the result of Congressional approval of the \$28.0 million transfer from the Aircraft Procurement, Navy appropriation to fund procurement of SKIPPER in FY 1983. The remaining increase of \$.3 million is the net result of minor reprogramming actions.

4. Ordnance Support Equipment - (\$+.4 Million)

The net program increase of \$.4 million reflects an increase of \$8.5 million for Submarine TOMAHAWK Support Equipment. Reprogramming actions which decreased the program include Surface TOMAHAWK Support Requirement (\$5.6M) and Fleet Mine Support Equipment (\$2.2M). The net of all other reprogramming changes is a decrease of \$.3M.

5. Civil Engineering Support Equipment - (\$-2.9 Million)

The net program decrease of \$2.9M reflects major reprogramming actions which include decreases of \$3.1M for Fleet Hospital Support Equipment and \$1.0M for Weight Handling Equipment. The net of all other reprogramming changes is an increase of \$1.2M.

6. Supply Support Equipment - (\$+6.6 Million)

The net program increase of \$6.6 million is the result of a reprogramming action which transfers \$7.0M from the APN appropriation to Special Activities. The net of all other reprogramming changes is a decrease of \$.4M.

7. Personnel and Command Support - (\$+.6 Million)

The net program increase of \$.6 million reflects a transfer of \$2.7M from Other Procurement, Army, to the Intelligence Support Equipment line in BA-7. The net of all other reprogramming changes is a decrease of (\$2.1M).

Comparison of FY 1983 Financing As Reflected  
In FY 1984 Budget With FY 1983 Financing As  
Shown In FY 1985 Budget

(In Thousands of Dollars)

	<u>Financing Per FY 1984 Budget</u>	<u>Financing Per FY 1985 Budget</u>	<u>Increase (+) or Decrease (-)</u>
Program requirements (Total) . . . . .	3,693,275	3,769,691	+76,416
Program Requirements (Service account) . . . . .	3,653,275	3,692,675	+39,400
Program Requirements (Reimbursable) . . . . .	40,000	77,016	+37,016
Less:			
Anticipated Reimbursements . . . . .	40,000	77,016	+37,016
Reprogramming from prior year budget plans . . . . .		28,000	+28,000
Unobligated balance available from prior year to finance new budget plans . . . . .			
Transferred from other accounts . . . . .	20,000	9,700	-10,300
Add:			
Reduction pursuant to P.L. 97-377 . . . . .	21,200	21,200	
Unobligated balance available to finance subsequent year budget plans . . . . .			
Transferred to other accounts . . . . .	72,600	50,900	-21,700
Appropriation . . . . .	3,727,075	3,727,075	

### Explanation of Changes In Financing

1. <u>Program Requirements (TOTAL).</u>	
This is the total change in the value of the FY 1983 program since submission of the FY 1984 budget in January 1983.	+76,416
2. <u>Program Requirements (Direct).</u>	+39,400
The decrease in program requirements represents the net effect of inter-appropriation transfers. Program increase of \$59,200 is partially offset by decreases totalling \$19,800.	
3. <u>Program Requirement (Reimbursable).</u>	+37,016
The increase in the reimbursable program reflects actual orders received in FY 1983.	
4. <u>Anticipated Reimbursements.</u>	+37,016
The increase is based on actual orders received in FY 1983.	
5. <u>Reprogramming from Prior Year Budget Plans.</u>	+28,000
The increase reflects a transfer from APN.	
6. <u>Transferred from Other Accounts</u>	-10,300
Planned transfer of \$20.0M from Weapons Procurement, Navy was not affected. Instead, \$7.0 million was transferred from Aircraft Procurement, Navy and \$2.7 million was transferred from Other Procurement, Navy	
7. <u>Transferred to Other Accounts.</u>	-21,700

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